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Agricultural.

Feeding One Cow on an Acre.

It has been often said that good farming would enable a man to grow enough on one acre to feed a cow a year all the rough forage she would need, if grain enough were given to make a properly balanced ration. We have no doubt but that it has been done when the land was rich, and care was taken to put in a new crop where the first was taken off, and some of the crops so grown were preserved in the silo, or even dried for use in winter.

We will describe how we think it could be done. Beginning the year before by sowing one-fifth or one-fourth of an acre in September with winter rye, using about a bushel and a half of seed to the acre, we fix the amount of land for one cow by the fact that certain experiments made at the Nebraska station have shown that one-fifth of an acre produced in a good season enough food to pasture one cow from May 1 to 31, inclusive.

We will follow their experiments for a little farther season, but when they go to crops which are not grown here, we should go back to a second crop to be grown upon the plots first sown. We would also say that we think or know that more feed would be obtained if the crops were cut and carried to the cow than if she were turned in to feed upon them. But by June 1 if this were the method followed, the rye would have grown quite too large for feeding. They found the rye very excellent pasturage, though the sudden change from dry feed to the rye caused a shrinkage in the milk production, and in live weight for the first week, but after the second week she returned to her normal flow. We have always given warning against these sudden changes, and think it may have contributed to the fact that the flow of milk and the amount of butter fat was not equal to that of cows pastured on mixed grasses at the same time. The amount of the rank-growing rye eaten probably caused scouring, or at least was not well digested at first, and the effects of this she would not recover from in one month. Those on the pasture grass were not likely to find too much the first week in May.

They sowed Canada peas broadcast on April 13, discing them in about four inches deep, which we think too deep, and on April 15, or six days later, harrowed in oats, using two bushels of peas and one of oats to the acre. This was ready to use as pasture on May 21, or when rye was gone, the peas beginning to bloom and the oats to head. This lasted one grow 21 days on one-fifth of an acre, say to June 21. If they had been cut they might have lasted longer.

A common variety of field corn was sown with a press drill on May 20, in rows about six inches apart, using two bushels of seed to the acre. On June 23 it was about two feet high, and the fifth of an acre furnished for one cow from that time until July 7, but it suffered from trampling, and we do not doubt that it would have fed a cow twice as long if it had been cut and carried to her. In a previous test with Southern Blue-stem corn, a similar plot pastured a cow from June 20 to July 13.

German millet was sown broadcast on a similar plot at the same time the corn was sown, using 50 pounds of seed to the acre, and on June 26 it was one foot high, and it fed the cow until July 13. In previous test, sown with drill on June 2, it was sixteen inches high on July 13, and fed her until Aug. 1, or twenty days on one-fifth of an acre. Some of the plants made a weak second growth.

We think its place might well have been taken by a crop of corn sown where the rye was taken off, about May 31, which would have been ready for fodder even earlier than the millet, if necessary, and lasted as long. In their tests the average for two years was 18 days for both corn and millet, and they think the millet did not give as good results as the corn, or any other crops they tried, in either the milk production or butter fat.

They tried sorghum and Kafir corn, and had the first in feed from July 13 to Aug. 14, one year, and July 6 to July 24 the last trial. Kafir corn was pastured at the same dates each year, but as these crops are not in favor in the Eastern States, and as the station does not speak highly of them, allowing danger from their use, and even of life if fed when injured by drought or frost, and as their season for feeding in July would be better covered by the corn planted May 20, and the second crop after the rye, which was finished at the end of May, we will not detail the treatment of them.

Cow peas were sown May 31 by the press drill, using one bushel of seed to the acre.

They were fit to turn into on July 24, to which time the corn after the rye should have lasted, and the fifth of an acre lasted twenty days, or until Aug. 13. The forage gave better results in milk and butter than any other crops excepting alfalfa, and judging by the two years test, a cow would give as much milk in twenty days on the cow peas as in twenty-five days on the sorghum.

They tried alfalfa one year. It gave less pasture than the other crops, but has two great disadvantages, the liability to cause bloating in cattle and sheep, and it is easily killed by overpasturing. The new grass, (bromus inermis) gave but a little more than half as much pasture as the alfalfa, and at the same season of year, but it may prove a very good grass as pasture for dairy stock, or when mixed with other grasses. Milo maize, soy bean and sand or hairy vetch were tried one year, but results were such that they did not think them worth a second trial. They found Milo maize had no advantage over Kafir corn, that the soy beans gave food of about the same quality as cow peas, but a much less quantity, and the vetch was inferior to cow peas in both respects.

Thus their experience brings us back to the opinion that we have before expressed, that winter rye sown in September at the rate of one acre to four or five cows would furnish feed for them during the month of May. Another sown with Canada peas and oats in April, the oats a week later than the peas, could be made to last nearly through June if pastured, and quite through it if cut and carried to the barn. The third acre should be in sown corn planted in May, and certainly cut and carried to the barn. The acre of rye could be replanted to corn about June 1, and two acres more might be planted in May, which could be saved as ensilage or as dry fodder for winter use. The fodder being cut instead of fed and trampled down would yield twice as much feed to the acre, or last at least eight months of the year for four or five cows, and the acre of peas and oats could be sown to oats and barley in July to furnish a late fall feed after the corn was all cut up. A second crop of rye could go in where the first piece of corn has been fed out, to begin with the next spring. In this calculation we have not taken into the account any grass that might be taken off the two acres of corn planted in June, yet we have sown a crop of June grass and daisies, which made very good hay, put in fodder corn after the hay was taken off, and obtained a very heavy crop of fodder, ten to twelve feet high.

Protein in Feeds.

Protein, or what has sometimes been called nitrogenous matter, is the most valuable element in the food the farmer gives his animals, because it is that which gives vigor, strength and energy to the driving and working animals; that which builds up the frame or bone and muscle of the young stock of all kinds; that which is the chief source of the material for producing milk to the cow, and to those suckling young, and also of the material for the egg of the fowl, duck or other poultry.

The carbonaceous matter and the fat of the food serve to produce fat, and should be used when fat is wanted in larger proportions than when feeding stock for work, for breeding, for milk or for eggs.

In all of our usual foods the three are combined, but in no one of them in such proportions as to make it exactly adapted to produce either effect to its full value when used alone as a food. Before these terms were heard of, the best farmers mixed their grain and varied their rough fodder because they had learned by experience that they obtained the best results by so doing, and yet they had no exact rules for so doing, working by guess and watching results. Now the chemists step in and say that while for fattening purposes the food may be in the proportion of one pound of protein to eight or ten pounds of the carbonaceous matter, or carbohydrates and fat, for other purposes, as for milk cows and growing stock, there should be a pound of protein to five or six of the others.

This may be varied by conditions, and especially by temperature where the animals are kept. The carbonaceous matter, not only makes fat, but it generates heat, and thus saves the animal from being up to its own fat to keep up the natural heat of the system in cold weather, or when not kept comfortably warm by night or day. Then the proportion of carbonaceous matter may be increased, while it should be decreased for working animals, and even for others when they must be out without shade in summer, whether working or not.

Knowing these facts the farmer can easily prepare what is called a balanced ration, or one to contain the proper proportions of these elements, by mixing feeds if he can know the amount of each in his fodders and grain. Most of these are given in Professor Henry's book on "Feeds and Feeding," but the table is too long to republish here, containing many articles not usually fed by farmers, and giving others in several different conditions of growth or varieties of the same plant.

We wish to call your attention to but a few of our most common foods and their comparative value, taking as a basis of value the approximate cost of each, the following standard, which, by the way, is one given in the Kansas Farmer, and is too low for the Eastern States, where both fodder and grain cost more. But as it is the only one we have at hand, we give it not as an arbitrary standard of prices, but for the purposes of comparison. They give the cost of the digestible protein at \$3.57 per hundred pounds, carbohydrates thirty-two cents and fat fifty-six cents, as grain is sold there.

Rowen hay is the most valuable, having \$5.32 worth of protein, \$2.56 worth of carbohydrates and 16 cents worth of fat in a ton,

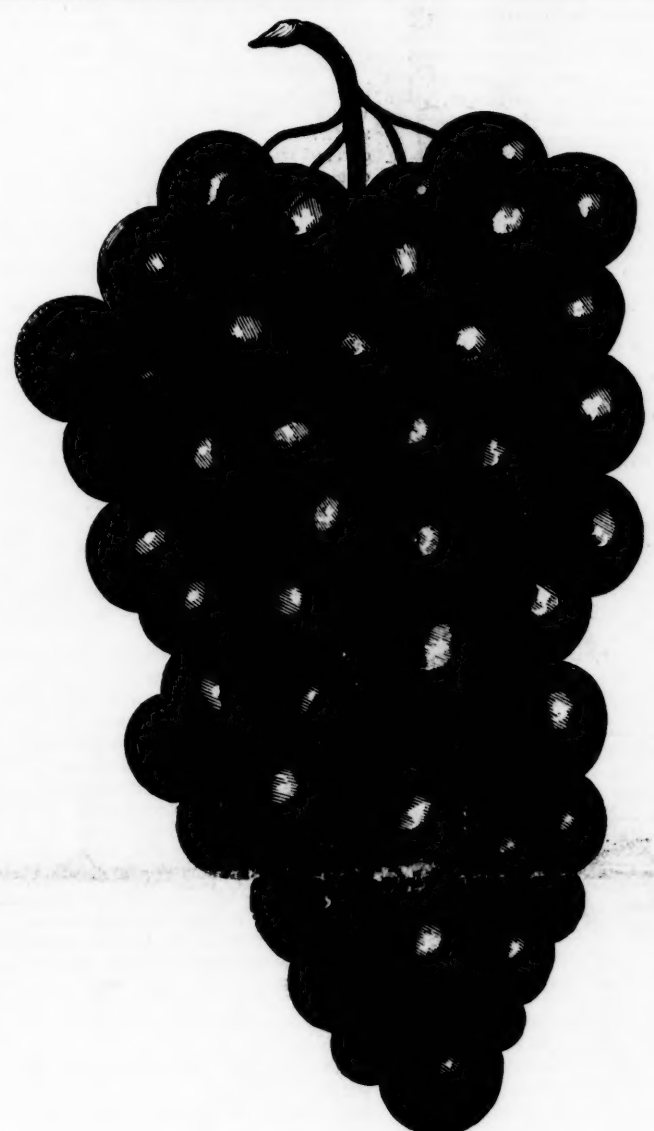
or a value of \$8.04. Timothy is least valuable, being in the same order, \$1.88, \$2.78 and 16 cents, or a total of \$4.82. Mixed grass hay takes second place, with \$3.98, \$2.62 and 14 cents, a total of \$6.74. Hungarian grass has a larger total value than blue grass red top or orchard grass, but has less protein and more carbohydrates. The soy bean has a higher valuation than anything else given when cured as hay, having \$7.28, \$2.48 and 16 cents, a total of \$9.92, principally in the protein, and oat hay, as we have long known, takes a high rank, with \$2.90, \$2.96 and 16 cents, or \$6.01.

But there may be surprises for some in the clovers, of which white clover stands at

about the same with corn ensilage. To increase the proportion of the protein we have cotton-seed meal, which has 644 pounds of protein in a ton to 802 of the others, linseed shorts or middlings, which have from 288 protein to 810 of the others for bran, and middlings with 244 protein to 1051 of others. Corn meal has but 156 protein to 1420 of others and does not help any, but dried brewers grains increases it, as they have 314 protein to 823 of the others in a ton.

Notes from Washington, D. C.

Prof. C. F. Langworthy, the human food



A NEW GRAPE.

the head, with valuations at \$7.76, \$2.70 and 18 cents, or \$10.64 a ton. Alfalfa hay is a little less than this in each element, and is placed \$10.10 per ton. Crimson clover lower yet at \$9.46 a ton and medium red clover hay \$4.08, \$2.30 and 20, or \$7.08 per ton. Fodder corn, field cured, is placed at \$1.08, \$2.22 and 14 cents, or \$4.04 a ton, and corn stover at \$3.30 per ton.

Among the grasses and other feeds given green Kentucky blue grass justifies its reputation by standing at the head with \$2.02 in protein, \$1.26 in carbohydrates and 8 cents in fat, or \$3.36 per ton, but oat fodder green follows closely with \$1.76, \$1.20 and 12 cents, or \$3.08 per ton. Red top in bloom is \$1.42, \$1.32 and 6 cents, or \$2.84 per ton. Mixed pasture grasses \$1.68, 66 and 6 cents, or \$2.40. Hungarian grass lower because of less protein, and timothy at \$0.12 and 6 cents, or \$2.04 per ton. Even green rye is better, having more protein.

Among the grains peanut meal stands the highest in protein and in total value, at \$28.92, \$1.76 and seventy-nine cents, a total of \$31.42 per ton. Cottonseed meal is next with \$25.08, \$1.08 and \$1.36, or \$27.52 per ton. This shows it better than linseed meal, either old process or new, the former having most protein, \$19.74, and total value \$22.64. Glucose meal has \$20.42 in protein and total value \$24.30, gluten meal \$17.38 in protein, total value of \$21.40, dried brewer's grains \$10.58 in protein and total value \$13.58. Wheat bran, shorts and middlings vary a little, the bran from spring having more protein than shorts or middlings, but less fattening quality. An average of them is about \$8.40 for protein and total value \$12 per ton, while flint corn has \$5.40 in protein and total value of \$10.28, dent corn a little lower. Rye, oats, barley and wheat screenings each have a larger amount of protein than corn and less fattening property.

But we said at the beginning that for stock not being fattened there should be about one pound of protein to five or six pounds of the other two elements. Let us make a few other comparisons. In rowen hay the proportions in a ton are 158 pounds protein to 832 of the others, not one to five, while timothy has fifty-six of protein to 896, or but one pound to fifteen of the other two. Mixed hay has 118 to 942, or about one to seven, and other ways do not vary much excepting soy bean hay which has 216 protein to 804 of others, or better than one to four, and oat hay has about one to eleven.

White clover more than one part in four, and alfalfa the same, while red clover is nearly a perfect ratio alone, standing one to 33. Fodder corn, field cured, has but one to seven, and stover less than one to ten. Taking a pasture of mixed grasses the proportion is about one to four. It will be seen then that on good pasture we need but little grain to make up a balanced ration, though more than when feeding rowen hay. On timothy and cured corn fodder more grain is needed, while with green corn fodder we get but one pound of protein to twelve of the others, and

expert of the Department of Agriculture at Washington, tells a singular story concerning some digestion experiments.

"Speaking of the length of time required for the digestion in the human stomach of the various foods we eat," said Professor Langworthy, "it is not an easy matter to say just how long it takes to digest any particular food. Many of the statements made are doubtless far from accurate, as the subject is not easily studied. It is possible to use in experiments the same digestive ferments which occur in the body, yet it is by no means certain that all the conditions of digestibility in the body can be reproduced in the laboratory. The results obtained are interesting and valuable, but it is to be noticed that careful investigators are much slower to make sweeping deductions from them than are the popular health writers.

"A remarkable opportunity was offered some years ago to a Dr. Beaumont, an army surgeon, for studying digestibility in the human stomach. A man was wounded in the stomach by the accidental discharge of a musket at close range. In time the large wound inflicted healed, but it left a permanent opening in the stomach, which was or directly closed by a valvular flap made by a fold of the stomach lining. This, however, could be easily pushed aside and the interior of the stomach examined or its contents removed as desired. Strange as it may seem, this could be done without causing the man annoyance or pain, nor was his general health affected after the wound healed in this curious manner.

"For many years after the accident this man was under the control and observation of Dr. Beaumont, and a large number of experiments were made on the length of time required for the digestion of different foods in his stomach. Artificial experiments were also conducted, using gastric juice removed from the man's stomach, which continued in excellent health. Special experiments were made with eggs cooked in different styles: Hard-boiled eggs required 3 hours for digestion in the stomach; soft-boiled eggs, three hours; roasted eggs, 2 1/2 hours; raw eggs, not whipped, two hours; raw eggs, whipped, 1 1/2 hours. The interesting feature of this actual experiment is that when tested by the methods of artificial digestion, which Dr. Beaumont made as closely resembling the natural digestion as he was able, the hard-boiled eggs required eight hours for digestion, the soft-boiled eggs 6 hours, and even the whipped raw eggs four hours. Similar results were obtained by the two methods, the actual and the artificial, with a large number of different articles of food tested.

"This is very conclusive evidence as far as digestion in the stomach is concerned, but it must be remembered that digestion continues in the intestines. This is an important fact, as food material which escapes digestion in the stomach may later be thoroughly digested.

"One of Dr. Beaumont's general deduc-

ons was that most of the common foods require from two to four hours to digest in the stomach, depending upon the quantity and the quality of the food, state of the stomach, etc., but that the time ordinarily required for the disposal of a moderate meal of the fibrous parts of meat, with bread, etc., is from three to 3 1/2 hours.

Some interesting wheat experiments have been carried on by the Australian government showing the efficacy of "pickling" wheat seed infected with smut. In the experiments sixty-six perfectly clean gains of wheat were rubbed together with smut balls until all the grains were thoroughly covered with spores. Half of them were then pickled in bluestone water, and sowed side by side with the unpickled grains. Of thirty-three grains of infested wheat, unpickled, thirty-two grew, and twenty-five of these were smutty. Of the thirty-three pickled seeds twenty-three grew, and only one was infested with smut.

It is a well-known fact that gardeners and planters have great difficulty in planting their seed. It has been stated that from three to five pounds of seed should be put in the ground where it is not necessary to use more than one or 1 1/2 pounds, could the seeds be evenly distributed; then after the plants are up, those caused by the surplus seed must be weeded out. Thus, not only is there the cost of the wasted seed, but the cost of the labor of weeding out the surplus plants incurred. But here comes the invention of a Wichita man.

This machine, which is simplicity itself, produces little strings of tissue paper, in which at regular intervals are seeds, thus making it possible to plant the smallest and most delicate seeds with rapidity, with as great if not greater regularity than could be done by putting each seed in the ground by hand. When the planter wishes to put in his seeds, all he has to do is to lay a string of the seed in a furrow and cover it with a hoe, or where there is much of it to be done take a small inexpensive reel drill that makes a furrow the depth desired, lays a string of the seed therein and covers it up.

The inventor claims, among other things, that the tissue paper strings attract moisture and make the seeds sprout quicker; that the lightest seeds may be planted with ease in windy weather; that it saves ninety per cent. of time in planting; that it plants in a straight line, and there is positively no destruction in hoeing, and saves about two days labor on each acre of land in thinning out, and with this elaborate flower beds can be planted in a few hours and makes gardening a pleasure.

In Brazil, strange as it may seem, cheese, though not made to any extent in the country, is an article of food which, to the inhabitant, is considered just as indispensable as coffee. According to Consul Girimondi at Santos, Brazil, cheese is much more extensively used than in the United States. In a recent report to the State Department, he called the attention of cheese makers of the United States to the promising market for American dairy products which Brazil presents. At the present time, he states, most of the cheese is brought from Italy, Switzerland and France, the working classes buying largely of the imitation cheeses, selling at about thirteen cents a pound. A wise course, he says, would be for several American dairy associations to send, in common, an expert to Brazil to carefully study not only prices, but the form and character of cheeses which the Brazilians desire. A general agency should be established at some large city, in charge of an American able to speak and write the Portuguese language. The agent should then employ traveling men to visit the retail dealers in different parts of the republic. Such a business campaign, intelligently carried out, could hardly fail to be exceedingly profitable to the American dairy trade. As this is the very class of work which the Department of Agriculture is doing to enlarge our foreign market for dairy products, it is probable that something in this line will be undertaken by the Government.

The government inspector of South Australia has discovered in that country the presence of a singular disease known as "beef measles." The disease appears in the beef in the form of small, hard lumps from the size of a pin head up to that of a grain of wheat. These lumps or cysts contain minute eggs which cause tapeworm in a man. Lumps to the number of three hundred have been found in a single pound of beef. Burning or boiling is the remedy. By burying the disease may be spread, as it is contagious.

GUY E. MITCHELL.

Live Stock Notes.

The Practical Farmer tells of a man whom it calls Friend J., who had just sold a fine drove of shotes, and going home met a neighbor who was complaining that there was no profit in farming, and especially in hogs, and he had twenty-seven he would like to dispose of. Mr. J. looked at them and found them about half grown, and finally agreed to take them. Then he bought one hundred bushels of corn of the same man, and obtained a little time to pay for the whole purchase. About three months afterward he sold another drove of fat shotes, and he went and paid his indebtedness. After he had done so, he said: "The shotes and corn I bought of you have paid for themselves, and there is so much over that I revalued for them." at the same time showing quite a nice little wad of bills. The farmer looked longingly at it, but he had obtained his own prices for shotes and corn when sold in separate lots, and the other man got his price for the shotes after they had eaten the corn. Mr. J. was a feeder, used a little brains in his business, and did not try to keep the animals on just a living ration, but to give them as much as they would eat and digest. It is what an animal eats above the amount required to sustain life that is the source of profit every time.

Professor Gowell of the Maine Agricultural College says they have now on the farm there seventy-five sheep, mostly full-blooded Sharpshires that have been bred pure for twenty years or more. This breed is entirely satisfactory, as they are hardy, vigorous, rugged and good producers of lambs and wool, and when properly matured furnish good, choice, thick mutton. They weigh from 140 to 170 pounds each, and are covered with a dense fleece of medium grade wool. The face and legs are dark brown and the wool grows well down on the legs. They lie out of doors in the yards night and day, and always sleep there no matter how cold it is. They like to lie in the snow, but they need to be taken in during storms, as it does not answer to have their heavy fleeces wet. They are not grain fed except when they are feeding lambs. They have hay, turnips and mangels until it is nearly time for them to lamb, when they are given a small ration of bran, corn meal and cottonseed meal, which enables them to furnish enough milk for the lambs.

After the lambs are born the ewes have all they will eat of this mixture, twice a day, besides hay and turnips. This makes them milk heavily and the lambs grow rapidly, so that they are fit for market at ten or twelve weeks old, selling them at \$4 to \$6 each. The lambs are dropped from the middle of February to March 10 each year, and though they have tried for six years they have failed to get the lambs earlier.

Two years ago they secured five of the Horned Dorset sheep famed for early breeding and have kept them pure, but the buck has been mated with Shropshire ewes, and they now have twenty ewes from this cross that they hope will breed earlier. They were bred this year for the first time as yearlings. These cross-bred ewes show the marking of the Shropshire more than of the Dorset, as they are hornless and have brown faces and legs. It is easy to get early lambs from the pure-bred Dorset ewes, but they are expensive. If the half breeds do not breed early enough another year they will try the effect of another cross, getting ewes three-quarters Dorset blood. The advantage of having lambs in December and January are great, as the December lamb will sell readily at double the price of the March lamb. There is not much extra trouble in raising winter lambs, if the ewes will breed early enough.

For purposes of instruction to the students they have also obtained specimens of the Oxfords, which is the largest of the Downs, the Hampshire, which is between the Shropshire and Oxfords in size, and the Cheviot, which is not a Down, but is of medium size, well woolled, clean looking with white face and legs. These will be kept pure, and little flocks developed that students and visitors may study them.

A writer in the Michigan Farmer thus figures up the account with one breeding sow. Cost of keeping 150 days on grass, with a mess of wheat middlings twice a day, \$6.20; 215 days winter on middlings, raw turnips, beets or beet pulp, all she would eat, four cents a day, \$8.60. Labor in caring for her and pigs, \$2.50. He had nine spring pigs worth \$2.50 each, \$22.50, and eight fall pigs at \$1.50 each, \$12. Cost of keeping \$17.30, income \$34.50, profit \$17.20, or practically 100 per cent. A Cheshire sow kept four years gave him 74 pigs worth \$6 each, or \$444, while four years board at \$20 per year cost \$80, showing \$364 profit. He has two feed lots, one plowed in August, and sowed with rye, oats, Canada peas and rape, then seeded the next summer with clover; a field of sweet corn is fed out stalks and all, and flat turnips or beets are sown after strawberries, that they may be ready for the winter feeding. While one field is in the sowed crops the other is in clover, and they are alternated. This gives strong growing breeding stock for his spring pigs. Upon a small farm he would keep pigs in a fair-sized yard, and grow sweet corn to feed them there, with small rations of middlings or shorts and skimmilk through the summer.

Now is the Time to Prevent Potato Scab.

Scabby potatoes won't pass in a critical market. In fact, the hired man hardly wants to eat them at home, and the hired girl objects to peeling them.

It is a good thing not to have scabby potatoes. Potato scab may be prevented by very simple means, according to Bulletin 85 of the Vermont Experiment Station, just now being distributed. Professor Jones says that potatoes should not be planted in soils where scab has been prevalent in previous years. Changing the potato patch to another field is a good preventive measure in such cases.

Scab is often brought in on the seed potatoes, however, and one of the most important means of prevention lies in the disinfection of the seed. This is accomplished by soaking in corrosive sublimate or formalin.

To treat potatoes with corrosive sublimate make up a solution of one ounce of the chemical in seven gallons of water, and soak the seed potatoes 15 hours in this. This solution is more poisonous than town gas, and is best to put the potatoes in a loose gunny sack and let them down into the solution by means.

To treat potatoes with formalin (or formaldehyde, as it is sometimes called), put a half pint of the chemical (which is a liquid) into fifteen gallons of water. Soak the potato seed two hours in this.

Take the potatoes out of either of these solutions, dry them, and plant as usual. The solutions kill the germs of the scab disease, and practically prevent its occurrence unless fresh germs happen to be present in the soil from scabby potatoes formerly grown on the same ground.

Agricultural.

Dairy Notes.

At the meeting of the Wisconsin Cheese-makers Association, one of the judges urged the need of more careful bandaging, uniformity of size, and the marking of date and number of vat, if more than one is used, that any fault that may exist may be traced to its source. He said faulty cheese should be marked and sent to be sold on its merits. In Canada it is the rule to give a half pound overweight on cheese two to three weeks old. Then it usually reaches the buyer at full weight. It should be boxed not more than twenty-four hours before shipping in clean boxes, the wagon bedded with straw and the cheese covered with grass in summer and with cloth in summer and winter as a protection from heat and cold.

An instructor in the dairy school said that the wide range between the cheese that scored from 72 to 98 points in the scale of one hundred was chiefly due to the difference in milk, and makers should insist on cleanliness. The milk producers should beware of dirt on the animal or the hands of the milker, and of filthy strainers.

Professor Riddick urged the use of galvanized iron steam pipes to prevent the rust under the vats, and condemned the use of water under the vats, flaring sides or channels on the vats. Washing the curd may be done if it is very bad, just before dipping, taking care not to get the curd too soft, but rinsing is needed just before salting, throwing the water on the curd to rinse off fat, which prevents the curd from closing. The curd should be perfectly loose so that water may pass through. In Canada many cheese makers use it on all curds to have the cheese uniform, and rinse after milking instead of earlier. It is important that the water for rinsing should be uniform.

Mr. H. B. Gurler of DeKalb, Ill., who keeps two hundred cows, and sells his milk in Chicago at twelve cents a quart, told the Connecticut Dairy Association that his milk goes to market in sealed jars, with date on the seal as a guarantee of freshness. He cannot from his farm meet the demand for his milk. To have pure milk one must have healthy cows, kept in good sanitary conditions. The cow stables need perfect ventilation more than the dwelling-house, as it has more inmates, and the doors are opened less frequently. They should be kept so clean that a person going in blindfolded would not know by the odor that he was in a stable, and if it is so that the barn odor fills a person's clothes it also flavors the milk. His cows are groomed once a day, a half hour before milking, and the udder is washed just before milking, with warm water in winter and cold water in summer, and one man can do the washing for ten milkers. Dr. N. S. Mayo of Storrs said the Connecticut had adapted for raising healthy cows, and it has fine, well-watered pastures and is cold enough in winter to kill disease germs. Calves need good food, pure air and healthy exercise. There is too much breeding of cows that are not well matured. As tuberculosis is most frequently contracted before they are matured, the calves should be isolated from older cows, and the older cows isolated as much as possible, and given plenty of pure air and sunlight.

At the Vermont Experiment Station they made tests for three different periods of the value of corn meal against gluten feed for cows in milk, giving one lot the gluten feed and bran, and another corn meal and bran, then changing, and again changing back again. As an average they had 2048 pounds of milk and 142.2 pounds of butter fat while giving the gluten feed, and 2790 pounds of milk and 123.3 pounds of butter fat while feeding the corn meal. They also found that they are seventy-eight pounds less of rough forage while eating the gluten feed, thus saving something in cost of feeding and gaining 288 pounds of milk or 16.6 pounds of butter fat by use of gluten feed. This is a gain of more than ten per cent. in milk, and more than thirteen per cent. in butter fat, proving that butter fat can be fed into the milk, a point which has often been denied by those who base their faith on a test made long ago of trying to increase the fat by feeding the cow on tallow, which she probably did not digest. Whatever was put fat on the ribs of the cow will make her milk richer in cream or butter fat, but food that increases the milk flow will not necessarily do the same until she begins to fatten.

The Baltimore American gives excellent directions for the care of cows before and after calving in regard to feeding light with long hay, fodder and bran, and giving exercise in warm barnyard in suitable weather for some weeks before the calf is expected, and keeping her in a roomy and well-bedded stall, where she is to be fed and watered, and in limiting the feed for a few days after calving to a slop, twice a day, of two quarts of fine millfeed, one pint linseed meal, put in two gallons of boiling water and allowed to stand until lukewarm, giving at the same time long hay of the best quality. To this we would add that, if the slop is kept covered so that it will cool slowly, it will be better, as it will more thoroughly cook the grain. But we do object to the directions that follow.

"If cow has a large flow of milk and the udder is hard, milk her out three times a day, and after milking rub the bag with hot vinegar and lard, rubbing it in well; this will remove the swelling in ordinary cases. If the udder is hot and feverish, a wash may be used, consisting of eight ounces of vinegar and two ounces of camphorated spirit; mix well, then rub a little of this in with the hand, rubbing the udder with both hands for about five minutes after milking."

The hot vinegar and the camphor are both what old people used to call "scattering" remedies, driving the inflammation to other points instead of removing it, and also causing a shrinkage of the milk by contraction of milk glands. Such treatment might result in a stiffness of joints or gathering of sores at other points. Bathe only in warm water, as hot as the hand can be borne in it, three or more times a day, rubbing the udder well each time, wiping it dry and drawing all the milk possible each time. The rubbing with lard or other grease may follow each bathing if thought desirable, as it may help, and we think can do no harm. We would add that in very bad cases of eaked udder the calf should not be allowed to suck the cow, as the milk is unwholesome, and the rough treatment of a hungry calf is not good for the cow. In such cases we would give about an ounce of pulverized saltpetre in the slop, or, if that has been discontinued, in dry grain.

In Brazil cheese is almost as staple an article of food as bread is here. No meal is thought complete without it, says our consul at Santos. They use among the well-to-do classes the European cheese, with which the cheese of this country might easily compete, allowing a good margin for profit and transportation, but the working class use an imitation cheese which costs about thirteen cents a pound. He suggests that the dairy associations send an expert there to ascer-

tain the form, character and prices of the cheese most in demand there, with a view to establishing an agency in charge of an American who can speak and write the Portuguese language. There then should be traveling agents to visit the retailers, and a profitable trade for us might be built up. We may need new markets if our trade with England shall decrease, or if they begin to enact a tariff law with a discrimination in favor of English colonies against other countries.

The board of health of Manchester, England, recently had all the cows which furnish milk to that city examined and tested with tuberculin. Within the city limits they found 603 animals that gave reaction under the test. Twelve of these had diseased udders, but only one was found that was tuberculous. Outside of the city limits there were 553 that reacted, and thirty-nine had diseased udders, but it was due to tuberculosis in only two cases. Three cases of tuberculous udder in 1158 animals that reacted under the test, and the best physicians agree now that no tuberculous bacteria will be found in the milk as drawn, unless there are tubercles in the milk glands or udder. The board of cattle commissions we had a few years ago would have killed 1153 cattle that gave good milk to avoid a danger that could have existed in only three of them, and would have been very doubtful as far as they were concerned.

Notes from Washington, D. C.
Interview with Secretary Wilson.

The decision of the President to retain his original Cabinet for his second term of office appears to be generally acceptable to the country. This applies to no member of the official family more forcibly than to the Secretary of Agriculture, James Wilson of Iowa. The work of this department has made tremendous strides during his four years of service. The Department of Agriculture is today different entirely from the farm section of the national Government four years ago when Mr. Wilson undertook its management.

"As you look back over the work of the past four years, Mr. Secretary, do you feel satisfied with what has been accomplished during that period?"

"Well," Secretary Wilson answered, "the work as generally planned has been carried out. Certainly the progress has been made. The department has grown very greatly. The work has increased to such an extent that it has been necessary to reorganize the department. After the first of July we will have four new bureaus, a gathering into groups of the different scientific branches which are to some extent related, so that by the conferring together of the different heads work can be laid out along the various lines without conflict, and in a more systematic manner than has heretofore been possible, where each chief of a division has carried out his plans under the personal direction of the secretary. It has taken so much of my own time that I have had little for anything else. This bureau organization includes all the scientific branches with the exception of Entomology, the Biological Survey and the office of Experiment Station, although the latter is itself practically a bureau.

"We are, by the way, getting into more intimate relationship with the experiment stations throughout the country. There is scarcely one we are not actively co-operating with. I think I may say that we are putting new life into some of the colleges and stations, to our mutual advantage. The Department of Agriculture has taken on the nature somewhat of an agricultural university. Half the population of the country lives upon the soil, and with all of the great universities in the land, practically nothing is being done for that half in the way of teaching agriculture outside of the instruction by the agricultural colleges. There is no higher course in agriculture in any of the great educational institutions, and in the work we are doing here we find it necessary to train up our own men. There is no source from which we can secure experts. If I want a soil physicist I can find no such graduate, or if I want a vegetable pathologist it is the same story."

"But the colleges come to your department, however, and take your men away after they have been trained, do they not?"

"Oh, yes, they get them to teach a smattering of agricultural sciences to the small percentage of our boys who are studying agriculture."

"The Department of Agriculture of the United States is having world-wide influence. We are getting to be able to successfully compete with foreigners, both at home and abroad. For a long time attempts have been made to grow tea in South Carolina. Last year two tons of choice tea was grown in that State and put upon the New York market. This tea did not meet one-tenth of the instant demand, and the result is that six thousand acres in that State are now being planted to tea. The Department is getting the very finest kinds of tea plants for trials and has secured the services of an expert from the Orient. Machines are being imported for the manufacture of green tea. If tea is dried in the sun it oxidizes and becomes brown in color. By putting it in a cylinder and pumping the air out, it dries a fine green. The culture of this tea requires irrigation, notwithstanding the sixty-five inches of annual rainfall it receives. During a couple of months of the year drought is likely to check the growth of the tea plants."

"Under your reorganization, the department will be still busier?"

"Yes. By the first of July, when the new law will become operative, we will begin to inspect exported dairy products. We will probably commence by giving a certificate to fine creamery butter, and refuse to it anything else; finally we may grade all export butters and refuse to let them go abroad unless under proper certificates. But we are pushing forward new work now. We have sent a man to the China and one to the Caribbean sea to carry on the work of establishing American markets for dairy products. This is a fight with the Danes, who could not send a single pound of butter out of their own country if our American farmer did not furnish them with cow feed."

"You know there has been considerable stimulation in the rice industry in the Southern States, which has been assisted largely by the efforts of the Government. We are now getting ready to send an expert into the several rice-producing countries of the Far East to learn some additional facts regarding this crop, to study the economy of rice production, to get a rice that will grow high up on the hills without irrigation where there is a reasonable amount of rainfall and to get rice suitable for stock feed."

"We are pushing experiments and inves-



ONION 11TH OF HOOD FARM.

tigations regarding hard wheats, gluten wheats, macaroni wheats, wheats with more nitrogen in them. These are only one or two of the things we are doing, but in one way or another the Department is in touch with every corner of the United States, and we are trying to get information and seeds and plants from every similar corner of the old world, for every section of this country has a corresponding soil and climate in the old world, where agriculture has been carried on for centuries."

The recent discovery of the remains of some forty populous cities in the desert of Syria show that in times past this whole great area was under an extensive system of irrigation. The country along the Euphrates and the Tigris rivers appears to have been networked with numerous canals, one large canal connecting the two rivers. The ancient metropolis of Babylon appears to have been protected from the summer rise of the Euphrates by high cemented brick embankments or levees along its embankments. To supplement this and to store water for irrigation a large reservoir was constructed, forty-two miles in circumference and thirty-five feet deep, into which the waters of the river might be turned by an artificial canal.

While Germany imported last year, mostly from the United States, over three billion pounds of corn, according to German statistics, this cereal is scarcely known as a human food in most parts of the empire. Consul Harris at Mannheim suggests the establishment of corn kitchens in some of the large manufacturing cities of Germany, similar to the Paris corn kitchen, which he believes would tremendously increase the demand for American corn.

The best use for American corn is home feeding and the exportation of the resulting finished product. Still, there is enough good corn land in the United States to enable us to pursue this policy to an unlimited degree, and at the same time furnish a hundred or two million bushels a year for German consumption.

Close observation is most valuable in the poultry yard. The eye should be kept on every bird, and the drones promptly weeded out. A small individual waste makes a large yearly total. The presence in the flock of a few poor birds means a reduction in the total percentage of receipts and an increase of the average cost per bird.

Brazil is going into the free-seed distribution business. It is, however, in the proper manner and does not contemplate the reelection of congressmen, but rather the introduction of valuable foreign seeds, a restriction which should be placed upon the American method. The seeds in question are from the United States and are intended for the cooler plateau regions of Brazil.

The American city milkman is not the sole occupant of the milk-water trust. Our consul at Frankfurt, Germany, reports that of 122 samples of milk examined by the Board of Health, over half were diluted with from ten to sixty per cent. of water. A test of 3794 samples in Hamburg resulted in proving 475 objectionable. GUY E. MITCHELL.

Butter Market.

Receipts of butter have increased and have more of good quality, and buyers are cautious about taking large amounts, so that prices have declined from a half cent to a cent since last week, and with the amount in cold storage lower prices are probable, unless export trade removes the surplus. New York holds firm rates as yet, but there is a decline in Western markets. The top price for extra creamery yesterday was 22 cents, and some large tubs sold at 21 1/2 cents. Best marks Eastern tubs at 21 to 22 cents, fair to good at 17 to 19 cents. Northern and Western firsts sold at 21 cents, and seconds at 19 to 20 cents. Extra dairy sold at 19 to 20 cents for Vermont, and Western at 19 cents, firsts 17 to 18 cents, seconds 15 to 16 cents, and low grades 12 to 14 cents. Butter from cold storage can be had at 10 to 16 cents, well renovated is selling fairly well at 17 to 18 cents for choice and fair to good at 12 to 15 cents. Box and prints in large supply, and some fancy marks reach 22 1/2 to 23 cents in small lots, but most extra creamery is 22 cents, extra dairy 20 cents for prints and 19 to 20 cents in boxes, fair to good 15 to 19 cents. Jobbers have been obliged to come down and sell creamery at 23 cents in tubs, 23 1/2 to 24 cents in boxes and prints.

The receipts of butter at Boston for the week were 19,705 tubs and 21,312 boxes, a total weight of 956,929 pounds, against 767,485 pounds the previous week and 767,054 pounds for the corresponding week last year. This shows a material increase over the previous week and last year, and the indications are that there will be a full supply this week.

The exports from Boston for the week were 18,505 pounds, against none the corresponding week last year. From New York the exports were 3257 tubs and from Montreal, by the way of Portland, 492 packages. The Quincy Market Cold Storage Company reports that 400 tubs of butter were put in

and 2057 tubs taken out, leaving a stock of 13,094 tubs, against 1920 tubs at the same time last year. The Eastern Company reports a stock of 3105 tubs, against 110 tubs last year, and with these added, the total stock of butter is 16,199 tubs, against 2030 tubs at the same time last year.

The Hay Trade.

There has been a firmer feeling in the hay market generally, and not as much is coming to Eastern markets as has been, but the supply is still in excess of the demand, and quotations are lower at some points, even on best grades. The demand is likely to be less soon, as dairymen will soon put their cattle in pasture, and the clover and mixed hay they have used must then sell slowly.

Boston still receives hay faster than it can be sold, as there were 360 cars last week, of which 62 were for export, and 25 cars of straw. Corresponding week last year, 361 cars, of which 3 were for export, and 16 cars of straw. Choice is now quoted \$18.50 to \$19 in large bales and \$18 to \$18.50 in small bales. No. 1 at \$17.50 to \$18, No. 2 at \$16 to \$17, No. 3, clover and clover mixed \$15 to \$16, straw, long rye, \$17 to \$18, tangle rye \$12 to \$13 and oat \$9 to \$9.50.

New York city has had better demand for the past week, and with lighter receipts there is better feeling in the market, though clover and clover mixed are weak for the reason named in first paragraph. The receipts for the week were 6235 tons, against 8020 tons previous week and 7700 for corresponding week last year, and the straw 290 tons, against 328 tons previous week, and the exports were 19,273 bales, against 3703 bales previous week. Jersey City also had less receipts than in previous week, and the feeling is firmer, though there is still a surplus above usual demand. Rains have probably checked outward movements some in both cities.

The Hay Trade Journal gives highest prices at various points April 5 as follows: Providence \$20, Boston \$19, New York and Jersey City \$18.50, Richmond \$17.50, New Orleans, Philadelphia and Baltimore \$17, Pittsburgh \$16.25, Buffalo and Nashville \$16, Cincinnati and Cleveland \$15, Duluth \$14.50, St. Louis and Memphis \$14, Minneapolis \$13.25, Kansas City \$11.

Arroostook County, Me., has shipped more hay than ever before and at good prices. It usually sells there at \$5 to \$6 per ton, and farmers do not count on much money from it, but this year it has brought about double the prices of former years, and it is estimated that \$300,000 worth have been shipped out of the county. Some have sold themselves short unless the stock find grass early.

The Montreal Trade Bulletin says that hay is firm at previous prices, orders being filled at country points for No. 2 at \$9 to \$9.50, o. b. Shipments are still going forward to Great Britain and the Cape, and there is an outlook for a steady export trade for some days. Cable advices report a stronger feeling in England. The past week's exports on English account of Canadian hay included 4246 bales from Portland and 2500 bales from New York. A steamer is loading at St. John, N. B., with 1500 to 2000 tons. Some bargains in the way of low ocean freights for Canadian hay have been picked up in Boston and New York.

The following rules govern the trade in hay and straw between the members of the Boston Chamber of Commerce.

Rule 1. All sales of hay and straw on spot shall be for cash on delivery unless otherwise agreed.

Rule 2. On sales of hay or straw on track in Boston, settlement shall be made at the invoice weights, unless the buyer gives to the seller, within ten days of the date of purchase, a certificate of weight, signed by one of the authorized weighers of straw appointed by the city.

Rule 3. On sales of hay or straw at country points settlement shall be made at the invoice weights unless the buyer gives to the seller, within ten days of receipt of the merchandise a sworn statement of the weights and the number of bales in the car.

Rule 4. All claims for damage or for inferior quality must in all cases be made in writing within ten days of the date of purchase if the hay or straw is delivered in Boston, and within ten days of receipt if delivery is made at country points. If no claim is made as above provided the seller's liability shall be considered as ended, and no allowance shall be made.

The New York Markets.

State and Western potatoes in light supply and higher at \$1.25 to \$1.75 for 180 pounds and \$1.25 to \$1.50 for sacks. Bermuda in demand at \$6 to \$8 a barrel for prime and \$3 to \$4.50 for No. 2. Havana are small and sell slowly at \$3 to \$4.50, with Southern seed and crop at \$1.50 to \$2. Jersey old from 50 cents to \$1.37 a barrel. Sweet potatoes quiet but steady at \$2 to \$2.50 a barrel for Vine-land, \$1.50 to \$1.75 for other Jersey, or 75 cents to \$1 a box. Domestic onions scarce and firmer. Connecticut and Long Island white \$3 to \$5 a barrel, red \$3 to \$3.75, and yellow \$3 to \$3.50. State and Western yellow \$3.25 to \$3.35. Orange county bags, red \$3 to \$3.75, Bermuda \$2.75 a crate and Havana \$2.50, with Egyptian \$2.50 a sack. Old beets 75 cents a barrel. New Florida 75 cents to \$1 a crate and Bermuda the same. Bunches New Orleans \$2 to \$4 per hundred, and Southern \$3 to \$7. Choice lots selling readily, but poorer ones dragging. Old carrots 75 cents to \$1 a barrel. New Bermuda the same per barrel. Bunches New Orleans \$2 to \$4 for 100, and Southern \$2 to \$3. Parsnips 75 cents to \$1 a barrel and Russia turnips 80 to 90 cents. Celery plenty and lower. Florida \$1.00 to \$2.00 a case. State and California from 15 to 85 cents a dozen as to size of roots. Squash, Hubbard \$1.50 to \$2, Marrow \$1 to \$1.25 and Florida new white \$1.50 to \$2.50 a crate.

BIG USERS OF CREAM SEPARATORS.

The Continental Creamery Company, Topeka, Kan., uses 175 De Laval Power separators. The Elgin Creamery Company, Chicago, uses 150. The Borden Condensed Milk Company uses about that many. The Beatrice Creamery Company, Lincoln, Neb., uses 135. The Franklin County Creamery Association, St. Albans, Vt., uses nearly 100. So does the Standard Butter Company, Oswego, N.Y.

The Brady-Meriden Creamery Company, Kansas City; Parker Creamery Company, Hutchinson, Kan.; and John Newman Company, Elgin, Ill., all use over 50 machines each.

The St. Marys Creamery Company, St. Marys, Ont.; Fairmont Creamery Company, Fairmont, Neb.; McCanna & Frasier Company, Burlington, Wis.; Belle Springs Creamery Company, Abilene, Kan.; Forest Park Creamery Company, Edgerton, Kan.; and the Heuston Creamery Company, Newton, Kan., all use from 25 to 50 machines.

All these are large Power machines, costing \$300 to \$800 each. In addition some of these concerns have hundreds of "Baby" De Laval machines scattered among their patrons.

Every concern named, as well as every other large user of separators, now uses and purchases De Laval machines exclusively.

THE DE LAVAL SEPARATOR CO.

NEW ENGLAND AGENTS:
MOSELEY & STODDARD MFG. CO.
RUTLAND, VT.

GENERAL OFFICES:
74 CORTLAND STREET,
NEW YORK.

Cabbages a little firmer at \$12 to \$16 a ton for State, \$1.25 to \$2 a barrel crate for Charleston and \$1.75 to \$2 for Florida. Cauliflowers from Florida \$2 to \$3 a basket, Norfolk kale 20 to 50 cents a barrel and spinach 20 to 65 cents, poor lots not bringing enough to pay freight. Lettuce mostly poor, but choice lots selling well. New Orleans \$3 to \$4 a barrel and North Carolina \$3 to \$4.50. Half-barrel baskets \$1 to \$2.50 for Florida, and \$1.25 to \$2 for Carolina, with bushel baskets 75 cents to \$1.25. New Orleans chioery \$4 to \$6 a barrel, escarol \$3 to \$5, Romaine \$4 to \$6, with some from Bermuda at \$1.50 to \$2 a crate and other Southern \$1 to \$2 a basket. Havana okra \$1 to \$2 a carrier and parsley 75 cents to \$1 a box for Bermuda, \$2 to \$3.50 per hundred bunches for New Orleans.

Asparagus in light receipt, but selling slowly. Charleston extra \$5 to \$7 a dozen bunches, and choice large would go higher, prime \$3 to \$4.50 and culls \$2 to \$2.75. California prime \$3 to \$4, and culls \$2 to \$2.50. Florida egg plant firm at \$2 to \$4 a box, and tomatoes irregular in quality from \$1.50 to \$3.25 a carrier. Green peas in better supply, but all qualities from \$1 to \$4 a basket, and string beans weak at \$1 to \$4.50. Too many not of good quality or in good condition.

Hothouse lettuce quiet. Eastern \$2.50 to \$3 a case. Cucumbers steady at \$1.12 to \$1.37 a dozen for prime to choice, 50 to 75 cents for No. 2. Tomatoes fair to prime dull at 10 to 20 cents a pound. Radishes prime \$2 to \$3 a hundred bunches and rhubarb \$5 to \$6. Mushrooms lower, good to prime 25 to 35 cents a pound. Mint 25 to 37 cents a dozen bunches.

Apples in large supply, mostly of medium or poorer quality. Spitzenberg \$3 to \$4.50 a barrel, Spy and Ben Davis \$2.50 to \$3.50. Some fancy Baldwin \$3 to \$3.25, fair to prime \$2.50 to \$2.75. Prime to fancy Greening \$3.50 to \$5, common to fair \$2.50 to \$3.25, and Russets \$2.25 to \$2.75. Cranberries quiet at \$7.50 to \$9 for good to choice. Cape Cod, \$6 to \$7 for common to fair Jersey crate, fair to prime \$1 to \$1.75. Florida strawberries more plenty and lower, prime to fancy 30 to 35 cents a quart, and fair lots 20 to 25 cents.

Notes and Queries.

WHITE HOUSE EXPENSES.—"R. W. C." writes the bulk of the expenses of the White House are paid by the President from his salary. There is, however, a contingent fund, appropriated annually by Congress, which meets part of them. This is understood to cover all repairs and furnishing of the mansion, the care of the grounds, greenhouses, etc., and the salaries of such employees as a night watchman, a doorman, janitor and policeman; also the President's private secretary and assistant clerks, and finally such expenses as stationery, postage stamps, etc. But it depends somewhat on the President's whims what shall be included under this "contingent fund."

A STOCK BROKER'S TECHNICALITIES.—"Lamb." A Bull is one who operates to depress the value of stocks, that he may buy for a rise.

A Bear is one who sells stocks for future delivery, which he does not own at the time of sale.

A Corner is when the Bears cannot buy or borrow the stock to deliver in fulfillment of their contracts.

Overloaded is when the Bulls cannot take and pay for the stock they have purchased.

Short is when a person or party sells stock when they have none, and expect to buy or borrow in time to deliver.

Long is when a person or party has a plentiful supply of stocks.

A Pool or Ring is a combination formed to control prices.

A broker is said to carry stocks for his customer when he has bought and is holding it for his account.

A Wash is a pretended sale by special agreement between a buyer and seller, for the purpose of getting a quotation reported.

A Put and call is when a person gives so much per cent, for the option of buying or selling so much stock on a certain day, at a price fixed the day the option is given.

HISTORY OF CLEOPATRA'S NEEDLE.—"Young Historian." The two obelisks known as Cleopatra's Needles were set up at the entrance of the Temple of the Sun, in Heliopolis, Egypt, by Thothmes III., about 1833 B.C. We have no means of knowing when they were built, or by whom, except from the inscriptions on them, which indicate the above time. The material of which they were cut is granite, brought from Syene, near the first cataract of the Nile. Two centuries after their erection Ramesses II. had the stones nearly covered with carvings setting out his own greatness and achievements.

Twenty-three years before Christ, Augustus Caesar moved the obelisks from Heliopolis to Alexandria, and set them up in the Caesarium, a place which now stands, a mere mass of ruins, near the station of the railroad to Cairo. In 1830 one of these obelisks was presented by the Egyptian government to England, but as no one knew how to move them, it was not taken to London until 1878. Subsequently the other obelisk was presented to the United States.

Popular Science.

A writer in the Bulletin of the Astronomical Society of France concludes, after an examination of meteorological observations all over the globe, that the average annual rainfall on the continents is as follows: South America about sixty-six inches, Africa thirty-two inches, North America about twenty-nine inches, Europe about twenty-nine inches, Asia about twenty-two inches, Australia about twenty-one inches.

The present year will see the starting of at least three expeditions, representing three different nations, in an attempt to solve some of the mysteries of the South Polar regions. One will

sail from Germany, another from England and a third from Sweden. The Swedish expedition is the latest to be organized, but it has been undertaken with enthusiasm, and King Oscar will personally give it financial aid.

Among the last experiments by the inventor, Prof. Elihu Gray, were those made on the last day of the century for transmitting signals through the sea. It was found that a bell sounded under the water could be heard through an electrical receiver as far as twelve miles in the open sea. The value of the discovery appears to be great. One of the first propositions is to send a series of submerged bells along dangerous coasts, which can be rung by electricity in time of fog and storm, then ships fitted with the receiving instrument will be warned at a safe distance of shore. Another possible use will be in notifying ships of the approach of other and especially submarine boats.

"The well-known French astronomer and writer, M. Camille Flammarion," says Electricity, "has for some time been making a special study of the effects of lightning on men, animals and other objects, and in order to illustrate the freakish conduct of lightning he recently told some stories which seem incredible. Thus he tells of two peasants who were preparing to eat breakfast, when suddenly all of the dishes were thrown on the ground, the bread, cheese and fruit vanished from the table, and they themselves were covered with straw. On another occasion a man, walking through Nantes, was enveloped in lightning, yet was not injured. When he reached home, however, and opened his purse, which had contained two pieces of silver and one of gold, he found that the gold piece had vanished and that in its place was a silver piece. The lightning had in fact, pierced through the leather of the purse and had covered the gold piece with a coating of silver taken from the other two pieces."

Humorous.

It was after the domestic tiff: "I really have nothing to live for," complained the wife.

"You forget my life insurance," remarked the husband, who was, of course, a brute.

"Towne—He is in hard luck. He had pretty good backing for an army commission, but his name queerer him. He had to sign his application, 'A Coward.'"

"Brown—Why did he have to sign it that way?"

"Towne—Because that's his name."

"Brown—But wouldn't it have been better to write his first name in full?"

"Towne—Hardly. His first name's Adam—Philadelphia Press."

Willie (crying)—Mamma—boo-hoo—Joe hit me with a great big brick. Boohoo!

Mamma—And what did you do to him, dear?

Willie—I hit him gently with that same little brick he threw at me—Harper's Bazar.

Jamison—Do you believe in second sight?

Hardup (sadly)—I'm sorry to say that I do. I picked up a coin the other day and thought it was a half-sovereign; but at second sight I found it was a farthing.

"You must feel very happy in this lovely cottage you call your own."

"How can I, when I think of my family that owned an estate of thousands of acres, with a castle and a whole regiment of servants?"

"Why, when did they lose it?"

"During the eleventh century."

"Do you believe there is really anything in phrenology?"

"I do. I had my head examined by a phrenologist once and the moment he came by my first bump he told me that my wife used an old-fashioned rolling pin."

Husband (at the theatre)—See how pale Mrs. Upwell is! I never saw her so affected by tragedy before.

Wife (sagaciously)—It isn't that; her back hair is coming down.

Henpeck—My wife's first husband was a lucky fellow.

Wife—How so?

Henpeck—He died.

Onion 11th of Hood Farm.

The accompanying picture of Onion 11th of Hood Farm 14305 was taken in her two-year-old form, and it shows a typical daughter of our stock and stock bull, Hood Farm 14305 (see 179 in the list), that has won many honors in the show ring, and his get have proved quite as successful, winning wherever shown. We have but few of his daughters in milk, as a number of them have been sold, though we were first to part with them, but those we have are grand dairy cows, combining those much-sought qualities, beauty

Poultry.

Practical Poultry Points.

A daily period of cooling the eggs, an airing or good ventilation and a certain amount of moisture are now allowed to be as essential as the heat for hatching eggs in the incubator. This is all attended to by the old hen when she steals her nest. She is usually out early in the morning looking for her food, that she may get it before any one can see her. That is the coolest part of the day, and if the air does not cool them enough while she is away they will soon get cooler if her legs and feathers are well wet with the morning dew. Yet in some way her eggs all seem to be fertile, and she manages to get a chicken from nearly every one of them, though she may have waited to accumulate fifteen or more before brooding them, so that some must have been at least three weeks old then. When we allowed hens to run at large we have had them come off with large litters, and we seldom, if ever, found a rotten egg in the stolen nest. We have had them come off so late that we were advised to knit stockings for the chickens, for stockings were all hand knit in those days; but we let them go barefooted, took as good care of them as we could, and lost but few, even when they were so wild that they would scarcely come to the house to feed with the older flock. We do not know as they were profitable, but in those days farmers kept hens that they might have eggs and chickens, and kept no account of cost of food or the returns from it. We think we are wiser now, and would be certain of getting some profit from poultry, and more if they were confined to yards than if running at large, but who knows?

The Farming World of Toronto has been asking questions about poultry keeping, and has made a synopsis of the answers. To the inquiries as to number of acres in the farm and how many hens were kept, they learned from 66 farmers that they had 3213 fowl, or about an average of 79 each. This was less than two hens to the acre (1.64 strictly speaking). As to breeds, 43 kept Plymouth Rocks, 18 Lechors, seven Wyandottes, three Brahmas and there were of Minorcas and Dorkings one each, while 11 had mixed breeds. As these number 84 some must have kept more than one breed, or more answered this question. As to feed, some feed warm mash and cut bone in the morning, others at noon and a few at night, but the great majority feed only dry grain in the winter, and some claimed warm feed in winter to cause colds and croups. The editor of the World does not think this the best way. In summer when they have ranges they may need only a little grain at night, and even this may be omitted from the beginning of harvest to first of October, he thinks.

Very few of them have a special poultry house, but allow them to roost in some part of a building where they will be out of the way. One correspondent describes his house as follows: He keeps thirty Plymouth Rocks and has a farm of one hundred acres. "Have a frame poultry house, 10x20x9 feet, double thickness of boards with tar paper between them. Building is well lighted by three large windows. Has two doors and one ground floor." Another who has three hundred hens on farm of sixty-nine acres says his poultry house is "built on the face of a hill facing south, 10x18 feet. It contains thirteen pens with two departments in each, viz.: the scratching room on the ground floor, and 2½ feet higher a floor which affords a roosting room, nest boxes, etc. Each room is entered from an alley. The attic is divided into rooms for growing chicks."

The price at which they sell fowl varies from 15 to 12 cents, the most common being 7 or 8 cents per pound. Alive, from 25 cents to \$1.50 a pair, the average being 71 cents a pair exactly. Dressed fowl from 37 cents a pair, and never exceeding \$1, averaging a little over 66 cents.

The price of eggs in summer is from 10 to 18 cents, averaging a little over 13 cents. In winter the average is over 24 cents, which is profitable if enough are obtained. Forty-seven stated number of eggs used in their families and the aggregate was 49,966, or nearly 1000 to a family. If all families in Canada used them as freely it would require about one thousand million eggs a year worth at 15 cents a dozen, \$12,500,000. The farmers who kept an account of the number of chickens and fowl they used at home averaged 22 pairs a year.

Most of them sell all their eggs for cash, and market them once a week in summer, and oftener if they have enough. In winter they have no particular time.

The cost of keeping hens varied from 25 cents to \$1.25 a year each, and the average was a little more than 79 cents, while the average return varied from 40 cents profit per head up to \$4, the average being \$1.67 per head.

All were agreed that not attention enough was given to raising of poultry for eggs and for the table in their vicinity, and thought the farmers need to be better educated up to see the possible profit in poultry keeping, which was what the editor of the World was trying to do in bringing out these facts.

An examination of the reports in detail showed that those who fed the hens liberally obtained the most profit. One man with sixty hens on one hundred acres said it cost forty cents a year to feed a hen and they returned him \$1.40, or a profit of \$1 each. The man who had three hundred hens on sixty-nine acres said it cost him ninety cents per hen, but his returns were \$2.75 per hen, a profit of \$1.85 each.

There are frequent complaints about the difficulty of marketing poultry and other farm produce at fair prices, but in some places this has been overcome by the co-operative plan of packing and shipping, and if accompanied by efforts to produce only the best, and practised in connection with the system of cold storage, there will be little to complain of in that respect.

Food Consumption and Eggs.

From careful test it has been shown that the largest egg production is always during the period of greatest food consumption and the smallest egg yield was when the food consumption was least. This invariably proves the case, so that one can depend upon the truth of it. The amount of food consumed sometimes varies according to its quality. One may make the ration so fattening that the hens will become too fat for egg laying, but with a reasonable diet the egg production will be in direct proportion to the amount of food fed and eaten. This means, of course, that the hens are able to digest and assimilate food, and not waste it. The feed should be given only in such quantities and times as needed, and when the hens will eat it up clean, leaving no waste at all behind.

There are several things to consider which will help to stimulate the food consumption so that a direct ratio will be held between the amount eaten and the number of eggs produced. One of these is daily exercise. The hens must receive exercise daily to keep them in good condition. They cannot eat, digest and assimilate a heavy

diet unless they receive exercise in proportion to the food. When stuffed with food for fattening, chickens and capons can for a few weeks eat a heavy diet without exercise, but if this was kept up for any great length of time the birds would sicken and die. They could not continue the process without causing trouble in the digestive organs. In feeding for eggs the process must be kept up indefinitely. Experiments have shown also that hens exercised will eat from two to five per cent. more food daily than those not exercised. These same hens will also lay from five to ten per cent. more eggs.

Next to exercise is the selection of the right kind of food. Here is a wide latitude offered to the beginner, and really every one must find out the solution for herself. Begin by feeding a mixed diet of such foods that are the readiest at hand and the cheapest to obtain. Sometimes one is located so that wheat screenings are about as cheap as anything, and nothing stimulates the birds to laying more than these screenings. Wheat is far ahead of corn for egg production, and it should be made the most of at all times. Green things from the garden, scraps from the table, and the refuse from mills all make a varied diet that will give the best results for the least possible outlay of funds. PENNSYLVANIA. ANNE C. WEBSTER.

Poultry and Game.

There has been a liberal supply of frozen poultry, but fresh killed is still scarce. Some large roasting chickens are 15 to 16 cents a pound and fair to good 10 to 13 cents. Choice fowl sells at 13 cents and common to good 10 to 11 cents. Pigeons are plenty at 75 cents to \$1 a dozen, and squabs scarce at \$1.75 to \$2.25. Western leed stock in fair supply at 10 to 10½ cents for fowl, 7 to 7½ cents for old roosters and 8 to 11 cents for fair to good turkeys. Chickens 11 to 12 cents for choice, 9 to 10 cents for fair to good. Fowl 9½ to 10 cents for choice, 8½ to 9 cents fair to good. Capons 13 to 14 cents for large, 11 to 12 cents for medium, and small or slips 10 cents. Ducks 9 to 10 cents and geese 9 to 11 cents. Turkeys choice small 12 cents, mixed weights 10 to 11 cents and large 9 to 10 cents. Some broilers coming now at 16 to 17 cents a pound for choice, and 14 to 15 cents for common. Live poultry in small supply at 11 to 11½ cents for fowl and 6 cents for roosters, with fair demand. A few mallards ducks at \$1.25 to \$1.50 a pair.

THE EGG TRADE.

It is reported that more than a million dozen of eggs were received in Boston during the week before Easter, but they were not all consumed here. Our suburban cities, and even those that are surrounded by farmers who should supply them, like Fall River and New Bedford, and some of the larger towns, send to Boston for eggs nearly every week in the year, unless it may be during the summer months. The source of supply here, like that in New York city, is mostly from the Western States, Indiana, Kansas, Ohio, Nebraska, Kentucky, Wisconsin and Michigan ranking about in the order named, though we seldom receive Southern eggs. Maine sends a few, and so does southern New Hampshire, and Cape Cod contributes some fancy eggs, which usually bring the highest market price, or at least, an equal price with those from the large henneries near Boston. Goose eggs are in fair supply, selling now about \$1 a dozen, or 10 cents each. Ducks' eggs are very plenty in the market, mostly pure white, and nearly all marked "Pekin duck eggs." They sell at 20 to 25 cents a dozen, while hens' eggs are 15 to 20 cents, though some fancy marks retail at 24 to 28 cents. The latter are usually large eggs with dark-brown shells, perhaps selected from lots which had all sizes and shades of color mixed.

Does Food Affect the Size of Eggs?

We all know that the size of eggs varies with the breed of fowls, but does it vary any with the richness and quantity of the food fed to them?

Have our wide-awake, agricultural experiment stations any data that will throw light on this question? If not, it certainly is worthy of investigation.

The results from my own experience incline me to take the affirmative on this question. I know that my eggs average larger than those of my neighbors, with a constancy that difference in breeds or age of the fowls will not explain. I keep about the same varieties, and all of us have a greater or less proportion of old fowls.

My practice has been to feed most abundantly and but once a day, with mixed grain, in sufficient quantity to leave generally a little surplus over. I feed also boiled potatoes, and drop in occasionally cabbage and clover. My fowls, therefore, have food always before them.

The economy of this plan will, I know, be questioned by many, but I have averaged, in a flock of about twenty-five hens, nearly 100 eggs annually to a fowl, though kept cooped

HURRY UP!

Everywhere one hears that expression "hurry up!" It is a genuine Americanism expressive of the "rush" in which we live. Nothing is swift enough for us. We race against steam and lightning and find them slow. We grudge the time given to eating, and rush through meals as though life depended upon our haste.

Life does depend on our haste, but not in the way we think. Look at the obituary columns of the papers and see how many prominent men are carried away by "stomach trouble," "acute indigestion" and other related diseases. Their lives have in general been sacrificed to the haste and rush of business which overlooked the fact that food can only nourish the body when digested and assimilated, and that the digestive and assimilative processes can't be hurried.

Dr. Pierce's Golden Medical Discovery, cures diseases of the stomach and the associated organs of digestion and nutrition. The source of all physical strength is food, properly digested and perfectly assimilated. By enabling the perfect digestion and assimilation of food, Dr. Pierce's Golden Medical Discovery increases and enriches the blood supply and sends new strength to every organ of the body.

"I was at one time as I thought almost at death's door," writes Mr. J. S. Bell, of Leander, Van Buren Co., Iowa. "I was confined to my house and part of the time to my bed. I had taken quantities of medicines but they only seemed to feed the disease, but I must say that 'Golden Medical Discovery' has cured me, and to-day I am stronger than I have been for twenty years. I am now forty-three years old."

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DOUBLE HYACINTH.

up all the year, and when killed they are fat as butter. It will be difficult to file a reasonable bill of complaint against my method.

I am more inclined to a liberal style of feeding because of the fact that most of my grain is seedhouse waste which could not be readily utilized in any other way.

J. J. H. GREGORY.

Marblehead, Mass.

Horticultural.

The Flower Garden.

The first thing to be done in the flower garden this month is to prepare the beds and put them in proper condition for planting. Clear them of all rubbish if any has been left in them from last year. Spade up the soil and let it remain several days to get thoroughly warm and dry. Then work the soil with the hoe and garden rake until it is very fine and no coarse lumps remain.

Many of the garden annuals should not be planted in open ground before the tenth of May. Pansies, nasturtiums, asters and verbenas come into bloom earlier and grow more rapidly if started indoors and transplanted to open ground the last of May or first of June.

But sweet peas, mignonette and poppies may be planted in the garden this month, and will do all the better for getting an early start.

Poppies show to best advantage if sown carelessly about here and there among other flowers, than if planted in separate beds by themselves. They make a charming effect, ranging from pure white through the various colors to maroon and almost black. They are, indeed, almost a flower garden by themselves.

Do not forget to plant a few of the hardy perennials. Give them a place in the garden where it will not be necessary to disturb them, giving proper attention to the arrangement by planting the taller growing varieties on the back and sides of the garden, so as not to obscure others of lower growth.

These hardy plants will live year after year, and give a good deal of pleasure for the little care they require.

Now is the time to set out hardy shrubs. By adding a few new ones each year one can soon have a good collection. The lawn is hardly complete without them, and they give a charm and attractiveness to the home.

ROSA E. KENISTON.

Danville Junction, Me.

Carnations by Millions.

A committee from the Massachusetts Horticultural Society visited last week the greenhouses of Mr. Peter Fisher at Ellis, to examine his stock of carnations, among which he hopes to produce something even superior to the famous Lawson pink, which he sold for \$30,000, and which was a product of the Daybreak crossed with the Van Loewen. The production of pinks, cross fertilized, is uncertain business, as it may result in splendid flowers the first year, and empty one to increase it as much as possible for the next two years, only to find that it has run out in the third year to very inferior flowers, or those no better than the old varieties.

He has a large number of seedlings of one to three years from seed, many of which are already condemned as not worthy of further propagation, and must be thrown out. There are also curious instances of variations in slips or cuttings. Thus of 150 cuttings from the Crane, a red variety, eighty-eight of them produced white flowers, some of which were 3½ inches in diameter. He has a bunch of seedlings from the Flora Hill, a fine white, and a brilliant red from stems of the Eastern Star, as also a fine-bristled white from Eastern Star, which bids fair to be a fine market variety, blooming very profusely and steadily, but with blossoms not as large as some others.

A plant which promises now to rival the Lawson pink is a seedling from a cross of Brant upon Lawson. It is a delicate pink in color, with flower stems three feet long. The flower is as large as the Lawson, has a delicate fragrance, stands up well, and five hundred blossoms have already been taken from a bunch of four feet square. The plants have not yet been put upon the market, but it has been grown three years without deteriorating. The Governor Wolcott is another promising new variety, pure white, with fluted edges, now very fragrant, though not as large as the Lawson. He has two greenhouses in plants and

cuttings and in one of them he produced last year more than 250,000 rooted slips of the Lawson, which he sent all over the United States and to foreign countries. It requires about four weeks to root a cutting, those going abroad being grown in pots and others in sand.

His principal greenhouse is three hundred feet long and has but four varieties. One-half the house is in Lawsons. Then he has the Eastern Star, a handsome white with strong stem; the Brant, the largest and best of the variegated carnations, and the Marquis, an old variety, large, pink in color and popular as a market variety because a very free bloomer.

The Maine is a white variety, produced from the Lawson four years ago, which has a delicate pink centre, which opens as the flower develops. On a bench of Lawsons, 150 feet long, there were twenty thousand buds and blossoms in sight and two thousand flowers ready for cutting. While his season is from September to the next August, there were but three days last year on which Mr. Fisher did not cut flowers from it. There were twenty-five buds and blossoms on a single plant at the time of the visit, and as many as fifty have been cut from one plant in a season. Mr. Fisher has received six handsome silver trophies, the silver medal of the Massachusetts Horticultural Society, the gold medal of the American Carnation Society and thirteen certificates of merit for this variety.

Vegetables in Boston Market.

The wet weather has made the past week a season of dull trade in the market, but the supply has been much less than usual on nearly all the vegetables, excepting some Southern and California products, and prices are firm. Old beets are higher at 40 to 50 cents a box, and bunch beets \$1.50 a dozen with beet greens 75 cents. Old carrots 10 cents a bushel and new 30 cents a dozen bunches. Parsnips 40 cents a bushel and flat turnips the same, white French turnips \$2 to 2.25 a barrel and yellow 90 cents to \$1. Native onions \$1.25 to \$1.35 a bushel. Havans \$2.75 a crate and Egyptian at \$2.50 to \$2.75 a bag. Leek 50 cents a dozen and radishes 40 cents. Cucumbers in fair supply at \$8 per hundred for No. 1 and \$5 to \$6 for No. 2, with Florida crates from \$1 to \$1.50. Florida peppers 25 to 30 cents a barrel. Tomatoes, hothouse 20 to 25 cents a pound and Florida crates \$2.50 to \$3.50. Rhubarb 7 to 8 cents a pound, and celery \$2.75 to \$3 a dozen. Asparagus is \$7.50 to \$9 for large cuts and small \$4.50 to \$6 a dozen. Hubbard squash \$1.50 a hundred pounds. Artichokes \$1.25 a bushel. Cabbage native 75 cents to \$1.25 a barrel, and Florida \$2 to \$2.50 a crate. Norfolk kale 50 to 75 cents a barrel, and spinach \$1. Lettuce from \$1.50 to \$1.75 a box, and fair demand. Endive \$1 to \$1.25 and dandelions 75 cents a box, with parsley at \$1.50. Egg plant, Florida, \$2.75 to \$4 a barrel and \$1.50 to \$3 a crate. Florida peas mostly poor. A few bring as high as \$3 a crate, but mostly at \$2 to \$2.50. String beans in fair supply, but wide range as to quality, \$3 to \$5 a crate, but most fair to good at \$4 to \$4.25.

Potatoes are in good supply, but there is good demand. Arrostook Green Mountains are 70 cents for extra and fair to good 62 to 65 cents. Hebron 65 cents for extra, and 60 to 62 cents for fair to good. Rose 50 to 55 cents, and Dakota Red 50 cents. York State and Western white 53 to 55 cents for round and 50 cents for long. Sweet potatoes in only moderate demand. Vineland at \$2.25 a barrel, other Jersey \$1.75 to \$2. North Carolina \$1.75 to \$2 for barrel crates.

Domestic and Foreign Fruits.

The receipts of apples last week were 2127 barrels and the exports 290 barrels, all to Liverpool. Same week a year ago 1434 barrels received, none exported. Fancy and choice stock from cold storage selling well, but not many fresh-packed coming, and they are dull. They are nearly cleaned up. Spy from \$2.50 to \$3.50 a barrel, fancy cold-storage Baldwin \$3 to \$3.25 and fresh-packed No. 1 \$2.50 to \$3, with No. 2 Baldwin and Greening \$1.50 to \$2, Tallman Sweet \$2 to \$3. Florida strawberries in fair supply, with fancy selling well at 35 to 40 cents a quart, fair to good 25 to 30 cents, and those in poor condition dull at 10 to 20 cents. Florida oranges nearly gone; only 17 boxes received last week. Choice bright sold at \$3.20 to \$4.50 a box and russet \$2 to \$3.50, with large at \$2.25 to \$2.75. Grape fruit at \$4.50 for choice and \$3 to \$4 for fair to good. Over 20,000 boxes California oranges. Seedlings, at \$2.25 to \$2.50. Navels higher, 176,

200 and 216 counts \$3.25 to \$3.75, 150 counts \$3 to \$3.50, 126 counts \$3 to \$3.25, and 96 or 112 counts \$2.50 to \$2.75. Bloods 216 counts \$2.75 to \$3, half boxes \$1.75 to \$2. Tangerines, quarter boxes \$1.25, and half boxes \$1.75 to \$2. California grape fruit \$4 for choice and \$2.75 to \$3.50 for fair to good. California lemons from \$1.50 to \$2.25 a box. Messina and Palermo, fancy 300 \$2.50 to \$2.75, choice 300 and 350 \$2 to \$2.25. Malaga grapes are cleaning up at \$4 to \$8 a cask, as to condition. Smyrna figs 8 to 12 cents a pound and dates higher at 3½ to 4 cents. Pineapples from 20 to 40 cents each, as to size, and bananas from \$1.25 to \$2.50 per stem, depending on size and condition.

Seed Crops and Their Selection.

It is gratifying to notice that most seed crops, such as beans, peas, turnips and other marketable winter vegetables, have had a satisfactory season, and that in spite of large imports of dried peas and beans, our American crops have sold at good prices. There should be no need of imports of any of these crops, and there would be none if intelligent American farmers would grow some of the varieties that are in fashionable demand.

Exports of American peas and beans have increased in the last year, partly due to the great quantities needed by the American army in the Philippines. The beans that are in the most demand and which pay the highest prices are not always the kind that the average farmer can raise at a profit. I have found that it pays better to raise the particular variety which seems adapted to my soil and climate than to force the growth of some which only indifferently thrive here. This I believe is becoming the fashion among all seedsmen and growers. There are certain restricted areas where onions do their best, and another where peas and beans thrive well. By finding out what crop will do the best in a certain locality we soon establish a reputation for quality that pays in the end. Connecticut white onions bring a dollar or more a barrel in every market because of the reputation established in this way. New York State hops are quoted higher than those of any other section for the same reason, and western New York peas and beans are likewise worth a little more than the average lot that goes to market.

More care in the selection of seed and varieties I believe is needed just now than anything else. Seedsmen and consumers of dried peas and beans are becoming more critical and exacting. They demand the best and pay accordingly. In raising crops of this nature it is impossible to tell beforehand the acreage or the average size of the crop, consequently the producer cannot estimate the output or chances of good prices. In most other farm products it is easier to foretell a possible glut in the market. It is well to dispose of the crop as a consequence as early as possible at a fair price. Plenty of dealers and seedsmen will make offers for the output if the condition of the seeds is guaranteed to be prime. This method of selling the crop in advance is in most cases the best, and produces more general satisfaction. S. W. CHAMBERS.

New York. —The shipments of leather from Boston for the past week amounted in value to \$198,931, previous week \$248,411, similar week last year \$209,685. The total value of exports of leather from this port since Jan. 1 is \$2,577,986, against \$2,744,580 in 1900.

—The exports from the port of Boston for the week ending April 6, 1901, included 18,265 pounds butter and 33,180 pounds cheese. For the same week last year the exports included 47,000 pounds cheese and 25,540 pounds butter. The world's grain exports last week were 7,397,093 bushels of wheat from five countries and 2,551,541 bushels of corn from three countries. Of these the United States furnished 4,098,033 bushels of wheat and 2,906,641 bushels of corn.

—Freshets and floods are reported as doing much damage in nearly every section, carrying away bridges and rafts of logs and timber, and in many places dams and bridges have also gone. Mills and factories are obliged to shut down, and in some instances are badly damaged, and railroad trains stopped either by washouts or by tracks being covered with water. It has been too much of a good thing. Morning papers say one hundred thousand men are out of employment, and some lives have been lost as a result of the flood.

—Imports into Boston for week ending April 6 were \$1,485,300 and exports were \$3,744,742. Excess of exports, \$2,259,442. Corresponding week last year imports were \$1,719,862, and exports were \$2,201,201. Excess of exports \$481,339. Since Jan. 1, exports have been \$3,217,754, and for same period last year they were \$2,267,134.

—Traffic makes the exports from the Atlantic coast to include 351,000 barrels of flour, 2,339,000 bushels of wheat, 2,841,000 bushels of corn, 320 barrels of pork, 12,329,000 pounds of lard and 23,964 boxes of meats.

—The farmers of Aroostook County, Maine, have been fortunate in their sales this year. In March they shipped 402,655 bushels of potatoes, or 22,375 bushels more than in March, 1900. Of hay they shipped 5,256,000 pounds, an increase of 774,500 over March of last year. Shingles shipped were 635 M., or 294 M. more than in March, 1900, and railroad ties 80,536, an increase of 14,109 over the same month last year. Owing to high prices for potatoes, starch fell off in production, and only 1,124,873 pounds were shipped, against 1,248,455 pounds in March, 1900. Prices have been good this year on all products, and prospects are now bright for heavy shipments in April.

The estimated shipments of citrus fruit from California for the present season is from twenty-five thousand to thirty thousand cars. This is the largest amount ever shipped in a single season in the history of the state. Much of this fruit has found an excellent market at prices better than the average in past years.

The receipts of eggs have been large, over 40,000 cases last week, but many are going into cold storage and prices are firm. Nearby and Cape May bring 15 cents. Eastern and North-western fresh 14 to 15 cents. Western fancy 14 to 14½ cents and selected 13 to 14 cents, with a fair to good Eastern 12½ to 13 and Western 13 to 14 cents. Southern good to choice 14 to 15 cents, and Western dirty 8½ to 9 cents. Case of thirty dozen, duck eggs, Southern and Western 25 to 26 cents, and goose eggs 35 to 40 cents.

—The shipments of live stock and dressed beef last week included 324 cattle, 294 sheep,

13,700 quarters of beef from Boston; 257 cattle, 3000 sheep, 19,740 quarters of beef from New York; 950 cattle, 2295 sheep, 1642 quarters of beef from Baltimore; 1262 cattle, 2500 sheep from Philadelphia; 1278 cattle, 4451 sheep from Portland, and 333 cattle from Newport News; a total of 10,541 cattle, 13,610 sheep, 37,701 quarters of beef from all ports. Of these shipments 629 cattle, 602 sheep, 29,909 quarters of beef went to Liverpool; 2174 cattle, 3055 sheep, 7122 quarters of beef to London; 1492 cattle, 1947 sheep to Glasgow; 538 cattle, 900 sheep to Bristol; 200 cattle, 206 sheep to Hull; 1000 sheep to Manchester; 1500 quarters of beef to Southampton, and 8 cattle, 194 sheep to Bermuda and West Indies.

The visible supply of grain in the United States and Canada, April 6, included 53,800,000 bushels of wheat, 21,900,000 bushels of corn, 11,399,000 bushels of oats, 1,112,000 bushels of rye and 850,000 bushels of barley. This shows an increase since a week ago of 243,000 bushels of oats and 3000 bushels of rye, and a decrease of 820,000 bushels of wheat, 207,000 bushels of corn, and 212,000 bushels of barley, but statement includes 645,000 bushels of wheat, 100,000 bushels of corn and 1,000 bushels of rye since burned at St. Louis. A year ago the supply was 55,412,000 bushels of wheat, 23,019,000 bushels of corn, 7,474,000 bushels of oats, 1,275,000 bushels of rye and 712,000 bushels of barley.

Muttons and lambs sell at steady prices, with veals rather firm: Spring lambs \$7 to \$9.50 each, fall lambs 7 to 10 cents, Brighton and fancy 8½ to 10½ cents, muttons 7½ to 9 cents, fancy and Brightons 7½ to 9½ cents, veals 7 to 10½ cents, and Brightons 9 to 11 cents.

—In beef trade was rather quiet, owing to the rain. But the market is reported firm, with the shippers urging higher prices: Fancy sides 8½ cents, choice 7½ to 8½ cents, good 6½ to 7½ cents, light and grass 6½ to 6½ cents, cows 6½ to 7½ cents, fancy hinds 10½ cents, extra 10 to 10½ cents, good 9 to 9½ cents, fancy fore 6½ cents, heavy 5½ to 6 cents, good 5½ cents, light 5 to 5½ cents, backs 6 to 7½ cents, raffles 4½ to 5 cents, chunks 5 to 6½ cents, short ribs 10 to 11 cents, rounds 6½ to 8½ cents, rumps 8 to 12 cents, rumps and loins 8½ to 13 cents, loins 10½ to 15 cents.

—The pork market is quiet, with lard 1 cent higher: Heavy hams, \$18.50, medium \$17.50, long cut \$19, lean ends \$28.50, ham in skin \$18, 10½ lbs, corned and fresh shoulder 9½ cents, smoked shoulders 9½ cents, lard 9½ cents, in pails 10½ to 10½ cents, hams 11½ to 12½ cents, skinned hams 12½ cents, sausages 9½ cents, Frankfurt sausages 9 cents, boiled hams 16 to 16½ cents, boiled shoulders 12½ cents, bacon 13 to 14 cents, bolognas 8 cents, pressed ham 11½ cents, raw lard 10 to 10½ cents, rendered lard 10 cents, in pails 10½ to 11 cents, pork tongues \$23.50, loose salt pork 10 cents, brisquets 11 cents, sausage meat 8 cents, city dressed hogs 9½ cents, country 7½ cents.

The solid light-fawn Jersey bull advertised in our columns this week by Hood Farm, Lowell, Mass., is of the right age to show as a calf next fall, and he is bred in the right lines to get first-class stock of fancy color and show points.

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Our Homes.

Easter.

Again we hail the joyous season of renewal and awakening. Apart from its religious significance it is a time of especial uplift, because of the promise it brings of golden days, when the earth shall again be clothed with verdure, and glad with the song of birds, the hum of insects and the happy murmur of rills. In those happy days to come one may find, far from the city's din and its costly church edifices, "sermons in stones, books in the running brooks and good in all."

Yet it is because of its deeper meaning that Easter has become a sacred day, a spiritual new year, and the church is the inevitable shrine to which the masses throng upon that day. The present Easter is especially of interest, as being the first in the new century, the outlook for which is prophetic of great spiritual and intellectual progress.

It is not alone the new garments supposed to be worn upon this day that attract the throngs in attendance upon the church services, nor is it wholly the music and the floral displays. The great majority of the people are more religious at heart than always appears upon the surface, and the Easter season appeals strongly to the consciousness of many who at other times are negligent in spiritual matters.

The Lenten season, to the devout, has been one of introspection and especial reverence, and the joyousness of Easter is a fitting climax, and conducive to a high degree of spiritual exaltation; and to such the music, the flowers and the festivity which abounds are but outward symbols of the gladness with which they enter upon a new year of endeavor. But to all who are privileged to participate in the church services, the fragrance of the lilies, the carols and the spoken word appeal not in vain.

All good influences are in league upon this day to uplift the soul of man, to bid him fix his thought upon that which is steadfast and eternal. Even the Easter bonnet, which has long been a target for the humorous paragrapher, is not without its mission. A renewal of one's garments is an inspiration to moral excellence. One year of endeavor. But to all who are privileged to participate in the church services, the fragrance of the lilies, the carols and the spoken word appeal not in vain.

The Easter glory is all about us. The songs of the robin and the bluebird, the swelling buds and the tiny crocuses peeping out from the dark mould tell us of the springtime, and earth and sea and sky unite to make glad this day of the risen Christ.

There could not be a more fitting time for a renewal of energy, a beginning of worthy endeavor; for laying aside, with one's old garments, the accumulations of selfishness and selfishness, of animosities and uncharitable judgments and lack of sympathy and love for one's fellow beings which have retarded one's progress. Thus divested, one may hope to emerge, as does the flower, from the darkness of earth to the clear light of the sun, and the Easter season will be indeed one of joy and happiness.

ELIZABETH ROBBINS BERRY.

The Workbox.

KNITTED GOLF STOCKING.

Two skeins of brown Fleischer's German-ton zephyr, 1 skein green.

With brown cast 84 stitches on each of 3 needles. Knit 12 needles, 2 plain and 2 purl, then 1 row plain of green, 3 rows purl of green, 5 rows plain of brown and 1 row of green. Next row, pick up 2 green stitches without knitting, and knit 5 plain of brown. Repeat for 3 rows, knitting brown and slipping green. With green, knit 1 row plain and purl 3. Repeat 3 times. Knit 1 row plain of brown and 4 rows of 2 plain, purl 2. Knit 1 row of brown, 1 of green and 3 purl of green. Next 4 rows, knit 4 in brown and slip 2 green, 1 row plain in green, and 3 rows purl, and 4 rows brown. Repeat 17 times, taking 1 stitch off at the beginning of the last row in each green cluster. Knit 1 row plain of brown, on which there should be 64 stitches. Make 40 rows, 2 plain and 2 purl, narrowing 8 stitches. Take off for the 2 back needles 32 stitches, leaving 24 on the other. On the 2 needles knit 2 purl 2, knitting 2 together on every second needle, until there are 4 left. With another needle pick up the stitches from the heel, fasten to the front and knit plain. Narrow till 1 remains and bind off. Sew strap to put foot through after legging style. EVA M. NILES.

Spring-Cleaning Hints.

It is not only the housewife, but all her belongings, that proclaim at this season that housecleaning is at hand, for during no other part of the year are so many defects apparent in furnishings. The carpet that has helped the room to an air of comfort during the winter suddenly shows unmistakable signs of wear, while the upholsterings reveal evidences of usage. Picture frames have lost their glitter, the leather of sofas and chairs and screens is dull, and even the bronzes, brasses and marbles, which are supposed to be cleaned regularly, show the need of more than the usual care.

Work should begin at the top of the house, and unless there are to be new decorations involving paper hanging and papering, no more rooms should be upset at a time than can be finished in one day. All bedding should have several hours in the yard in the sun and air. The winter blankets should be laundered and packed away for summer, and the warm winter garments brought out. All furs and winter garments should be thoroughly brushed and beaten and put away as soon as they are laid aside. This will prevent an increase of work later to rid them of moths, and will save them from danger of ruin by the pests. Many old

housekeepers declare that printer's ink is particularly distasteful to moths, and that articles securely wrapped in newspapers, if free from contamination when put away, will be as safe from such intruders as if a whole pharmacy of chemicals were done up with them.

Soft newspaper is excellent, too, for polishing windows and mirrors. Before the windows are washed every outside shutter should be taken off and thoroughly cleaned. A note should be made of all needed repairs—broken blinds, loose putty, hinges that need a screw, castors that are uncertain, chair spindles that have been loosened by standing near heaters, and the thousand and one discrepancies that suddenly present themselves.

A cloth wrung from hot milk will restore the lustre of leather furniture. Polished woods should not be cleaned with water, unless actually dirty. In that case a sponge should be used, and a speedy polishing with oil and turpentine should follow. A few drops of olive oil and a brisk rubbing will efface many of the spots on furniture.

Varnished furniture which shows hard usage will be improved by first washing it with warm soapsuds and then rubbing it with a mixture of equal parts of spirits of turpentine, sweet oil and vinegar. White spots caused by heat will sometimes disappear if a moderately hot flatiron is held over them for a few minutes—not, of course, touching the wood. Frequent rubbings with olive oil prevent fine inlaid and mosaic furniture from cracking, and the same remedy is excellent for oilwood boxes and tables. Cane chair bottoms are improved by thorough soakings in hot water, and a later drying in the sun and air.

Marble tables, mantels and hearths which are stained may be cleaned by covering the discolored places with a mixture of whiting and crude oil. Let it remain overnight, then wash off with warm water and a little ammonia. Wipe it dry at once, and polish with a soft cloth or chamois.

Any break or loosening in picture frames should be repaired at once, else the dust and damp will enter and soil the picture, as well as the mat, if there is one. Perfectly clean, dry cloths should be used for dusting gilt frames. If there are spots on frames of the best gilt, they can sometimes be removed by rubbing them with a clean cloth moistened in very weak ammonia water. Cheap frames are seldom improved by anything but a dusting, although chloride of potash or soda mixed with white of egg is said by some to revive their brilliance.

Oxalic acid is the best agent for cleaning brass andirons, candlesticks, etc., which have suffered from neglect. It is applied with a flannel cloth, and a brisk polishing with chamois follows. A paste made of rottenstone and turpentine is all that is required for polishing brass that simply needs brightening.

Bronzes should be dusted with a soft cloth, and then rubbed with a cloth moistened with sweet oil. Then rub with a soft cloth and polish with chamois.

Copper cooking utensils, the hot-water tank, spigots and the zinc bath tub should be cleaned periodically with hot vinegar, in which salt has been dissolved. If they have been allowed to get very dirty a scouring of soap and ashes will restore them to brilliancy.

In cleaning the walls of a room a long-handled broom covered with a soft cloth should be used, and where there are spots this should be supplemented with the crumb of stale bread. The latter should be used carefully, rubbing it in one direction and discarding it as soon as it is soiled. Stale bread will also clean soiled drawings and photographs.

Woodwork that is white or light colored should be carefully dusted before it is washed, and then very little water should be used. Dark wood can be cleaned with a cloth moistened with oil and turpentine or with kerosene.

A carpet that does not need taking up can be wonderfully freshened by first sweeping it very thoroughly, and then going over it with a cloth wrung frequently out of clean water, to which has been added a little ammonia. A thorough mending of cleaning a carpet, and one which restores its color to a marked degree, is to first take it up and have it thoroughly beaten. Then secure it to a floor with strong tacks at the corners, and scrub it with a new broom dipped into a pail of water, with which has been mixed oxgall, in the proportion of a pint to three gallons of soft water.

Cloths wrung out of salt water are the best for cleaning matting.

A feather dipped in oil and applied to creaking hinges and stiff locks and door knobs will work wonders.

Although every drain in the house should be flushed thoroughly and often, more than the usual care should be taken at this season. After flushing with hot water a strong solution of sal soda should be sent down. It is not a bad idea to follow these with odorless disinfectants in all drains.

Nothing is more important—perhaps, indeed, nothing is so important—in the spring rejuvenations as the cleansing of the cellars. Plenty of light should be turned on so that no particle of decaying organic matter in the way of fruits and vegetables is overlooked. Rat and mouse holes should be filled with chloride of lime. The furnace and coal bins should be thoroughly cleaned out. Generous coatings of whitewash will add to the cleanliness of the place and the safety of the family health. If the cellar is of the modern sort and has a drain pipe in the cement floor, flush it in all its corners with a hose, but see that it is dried thoroughly.—N. Y. Tribune.

Catarrh.

Catarrh is an inflammation of any of the mucous membranes of the body. It is marked by the usual signs of inflammation, and as the word implies—being derived from Greek word meaning to flow down—by a

more or less profuse discharge. Catarrh may be acute or chronic, and the latter, as will be explained later, may be either atrophic or hypertrophic.

Acute catarrh unfortunately needs no description, for it is only too familiar to us all as a cold in the head. In this case it is the mucous membrane of the nostrils which is inflamed. The most obvious symptoms are swelling of the membrane, which may be so great as to close the nostrils completely, and a profuse discharge.

When acute catarrh attacks the pharynx or larynx we have a sore throat, and if the inflammation extends still farther we have bronchitis. In the latter case the most evident sign is a cough, due either to the presence of a mucous discharge or to irritation caused by the air passing through the inflamed bronchial tubes.

In young children the inflammation in the larynx causes much swelling, and this gives rise to the difficult breathing and hoarse voice which characterize one form of croup. If catarrh attacks the stomach it causes severe indigestion, and when the intestinal mucous membrane is affected the most prominent symptom is diarrhoea. Conjunctivitis and acute inflammation of the ear are the expressions of catarrh of the eye and of the drum of the ear.

In chronic catarrh the process is less active, there is usually little or no pain, but the discharge is profuse and thick.

The hypertrophic catarrh the mucous membrane consists of the mucous membrane, but in atrophic catarrh it is thinned. Atrophic catarrh is not really an inflammation, but rather the result of a previous inflammation which has destroyed the mucous membrane, leaving in its place merely a thin skin, covering the surface, but answering none of the purposes of a mucous membrane.

A catarrh may be caused by anything that acts as an irritant to the mucous membrane,—dust, sulphurous, ammoniacal or other strong fumes, undue dryness of the atmosphere, and so forth, in the case of the air-passages or eyes; indigestible food, alcohol, and so forth, in the case of stomach or intestines.

Often the inflammation is due to the action of microbes, which are probably always present, but can work harm only when the soil has been prepared for them by mechanical injury, or by congestion caused by chilling of some portion of the surface of the body.—Youth's Companion.

The Clothes Moth.

We may marvel at grubs growing fat and succulent upon such unpromising fare as old timber shavings, but that achievement is, inured upon by the insects that prefer to draw their entire nutrition from woolen fabrics, fur, horsehair, feathers, tanned leather and the like, and apparently without ever a desire to "wet their whiskies" by anything of a juicy nature. Any small, silvery-winged moth that is seen flitting about the house is regarded as a "clothes moth," but every one killed is not an enemy, for there are a number of moths of similar size and appearance that have come from outdoors and have been occupied as grubs in destroying green leaves. It is a common error to suppose that it is the clothes moth that does the mischief, though by destroying the moth we prevent the laying of innumerable eggs from which come the consuming larvae, whose cutting jaws would actively and incessantly employed in mutilating choice fabrics and valuable furs. These caterpillars are rarely seen by the housewife, because their first care on leaving the eggs is to disguise or hide themselves.

The clothes moth proper has yellowish-gray wings, with three or four indefinite brownish spots upon them, and in consequence of its marked preference for furs it is known to science as *tinia pellionella*.—Good Words.

Domestic Hints.

SCALLOPED OYSTERS.
Clean one pint oysters, moisten one cup cracker crumbs in one-third cup melted butter. Put one-half cup crumbs into baking dish, then one-half of oysters, season with salt, pepper and lemon juice, then another fourth of the crumbs and remaining oysters. Season and cover with remaining half of crumbs. Bake in quick oven until liquor bubbles.

MAYONNAISE DRESSING.
Put one teaspoonful each of mustard, salt and powdered sugar, one-eighth teaspoonful paprika and two raw egg yolks in a saucepan placed in a large pan of ice water. Stir with wooden spoon till eggs thicken. Tilt the pan, pour in one tablespoonful olive oil, and stir it in gradually. Add half of crumbs into baking dish, then one-half of oysters, season with salt, pepper and lemon juice, then another fourth of the crumbs and remaining oysters. Season and cover with remaining half of crumbs. Bake in quick oven until liquor bubbles.

PRUNE WHIP.
Soak one pound of prunes in cold water for several hours, put in a boiling water and simmer till soft. Remove the stones and mash the prunes through a coarse sieve. Beat the whites of four eggs very stiff, adding a speck of salt. Add gradually to one pint of prune pulp, which has been sweetened with one-quarter to one-half cupful of sugar. Turn lightly on to a buttered platter, set that platter in the oven over a pan of hot water, and bake at a moderate heat for about twenty minutes. Serve cold, with custard made from the yolks of the eggs, four tablespoonsful of sugar, one-eighth teaspoonful of salt one pint of milk and one teaspoonful of vanilla.

LOBSTER SALAD.
Boil two live lobsters in salted water; when cold remove the meat and cut in small pieces; add one head of celery, chopped fine, and two tablespoonsful of chopped olives; line a salad dish with the prettiest leaves from a head of lettuce; toss in the lobster meat, and garnish with lettuce leaves and the coral from the lobster. Dressing—Mix the yolk of one egg, butter the size of an English walnut, one teaspoonful of sugar, one-half teaspoonful of salt, one-half cup of vinegar and a dust of cayenne; cook in a double boiler, stirring all the time; when cold add one-half cup of cream.

PARISHENNE POTATOES.
With a cutter cut large potatoes into balls like marbles. Cook slowly in boiling salted water about ten minutes, or until you can pierce them easily with a fine skewer without breaking them. Drain and shake carefully until dry. Pour over them one tablespoonful of butter melted, and roll about until all are buttered; sprinkle with salt, pepper and minced parsley.

OYSTON SOUP.
Peel and slice four large onions, scald and drain. Cover with cold water and simmer till soft. Strain through a vegetable strainer, add one cupful milk, and one egg. Cook one tablespoonful of four in one tablespoonful of butter, and gradually add the liquid from the onion till smooth and thin enough to pour into the soup. Season with one teaspoonful of salt and one spoon of black pepper. Beat one egg, add one cup of cream, and stir quickly as it is taken from the fire.

Hints to Housekeepers.
Coldwaters of china, or rather of yellow ware, are to be preferred to those of tin or other metal. Their use for purers and delicate jellies is especially serviceable, the tin often imparting a disagreeable flavor.

Creamed fish or fowl may be satisfactorily combined with rice. Fill tinable moulds with boiled rice and set them aside to cool. When the rice is cold scoop out the inside, turn out from the

moulds, and fill the hollow centres of the moulded rice with the creamed meat.

Filmy silk that has gone into a multitude of age wrinkles may be smoothed out and restored to something like its original freshness by sponging it with gum arabic water. Sponge the right side of the silk, and when it is almost dry iron the wrong side.

A delicious flavor may be given to coffee by rubbing the lump of sugar which sweetens it over orange or lemon rind. People who like the acid of lemon in their tea will appreciate a slice of lime instead, which will give a deliciously piquant flavor.

Onions in any appetizing form are well adapted to the spring bill of fare.

When the yolks of eggs are left over in the process of cooking they may be kept from drying and in a perfectly fresh condition by dropping them unbroken into a bowl of cold water. These will be as good for salad dressings or cake as freshly broken ones if kept in a cold place.

Fashion Notes.

••••• Jet buckles—the only touch of black on them—are seen on some of the new light hats. They are prettiest when not too large or heavy.

••••• Small buckles used as slides on silk bands and velvet ribbons are one feature of dress decoration.

••••• Mammoth hydrangeas, poppies and chrysanthemums, huge carnations, cabbage roses and azaleas made of gauze, chiffon or ruffled tulle appear among the most fashionable trimmings on French hats of satin braid, Milan or chip. Very often the entire brim of the hat is covered with the leaves of the flowers used. The rest of the brim consists of the most delicate draperies of tulle, Malines, net or chiffon.

••••• Handmade Venetian cloths, silky English serges, Borneo and Saxony chevrons, and diagonals are among the stylish wools used for spring tailors.

••••• New Scotch tweeds for traveling, soft evening costumes and costumes of leather and check effects. The satin-finished Melton suitings are a new English weave, crossed with silky lines of camel's hair. In the extensive and elegant exhibits of spring fabrics, the beautiful weaves and colorings in French camel's hair are one of its special attractions.

••••• Various kinds of jewel applique work and passementerie, set with genuine diamonds, pearls, etc., were among the gifts presented to fortunate brides by wealthy friends and relatives at recent very fashionable weddings, both here and abroad, and notably the wedding of Miss Constance Sheehy, Cornwallis West to the Duke of Westminster, that of Lady Beatrice Butler to Major General Pole-Carew, and that of M. Paul Deschanel, president of the French Chamber of Deputies, to Mlle Germaine Brice.

••••• Rose color introduced in the hat or toque imparts a tinge of color to pale complexions. Worn below the face, it is, on the bodice—or more pronounced still, if the blouse or bodice itself be rose or red—the effect on natural coloring is to pale it very considerably in appearance.

••••• New Paris-made summer dress models have the skirts flared and without a binding, and instead of the lace or muslin balayouse, the French modiste puts a six-inch pinked ruffle of silk, that matches the drop skirt or lining of lawn or batiste, on the extreme edge of the skirt, which gives a dainty and tasteful finish to the inside of the hem when revealed by accident.

••••• Something very effective for long curtains is a moire cloth which comes in bright but not garish colors.

••••• Accordion-plaited muslin in any of the delicate colors makes a pretty lampshade mounted upon cardboard and tied around at the top with a satin ribbon. This is especially suitable for the summer cottage.

••••• It is asserted that white serge is to be freely used for summer tailored gowns, and that the thin woolen fabrics in white will be generally employed for dressy gowns until extreme heat drives women to muslins.

••••• Black and white combinations are characteristic of the new styles. Some charming gowns of white muslin have narrow ruffles edged with ruchings of black, reaching almost to the waist. White washes and black accompany these, and the only touch of color permitted is a choux of blue, red or pink on the bodice.

••••• Traveling dust coats of black taffeta have a place in the fashionable summer outfit. The prettiest are fashioned nearly all over, but the tucks add light and warmth, neither of which is desirable.

••••• Point d'Arabe laces in the eury shades are very popular for dress trimmings.

Premature Burials.

[Reprinted from Our Dumb Animals.]
On the testimony of eminent physicians and many others both in Europe and this country, nothing can be more certain than that large numbers (and perhaps multitudes) of persons have been buried alive—and that many, after having been pronounced dead, have shown signs of life in time to save themselves from such burial, and have declared that while unable to move they were fully conscious of what was said and done about them. My own father barely escaped such burial, being declared by his physician dead.

I have many times called attention to this subject in Our Dumb Animals and elsewhere, and have, in behalf of our American Humane Education Society, petitioned the Legislatures of each of our United States, and written the president of every Senate and speaker of every House of Representatives, urging more stringent laws on the subject.

I am now glad to see that a bill is before our Massachusetts Legislature which, defining various tests of death, these tests shall in cases of supposed death, these tests shall be made by two competent physicians at the expense of the cities or towns, and that in every city and town shall be provided rooms and suitable apparatus for carrying out these tests.

This is all good so far as it goes. But it is vouchered for by many eminent physicians in Europe and this country (including our own) that in ordinary cases there is no absolute certainty of death until the beginning of decay.

Now, there are in Boston alone many thousands of persons living in hotels and boarding houses where whenever death is declared every effort will be made to send the body of the supposed deceased at the earliest possible moment to the undertaker, the crematory or the grave. In not one case in a hundred will the body be permitted to remain in the hotel or boarding house until the beginning of decay.

Now what is the remedy? I answer—I have seen in Europe "mortuary" buildings to which the bodies of the supposed dead are taken and carefully cared for under the best medical inspection until death is absolutely certain.

Now (in my own case), if such a building could be established in Boston I should be glad to pay a hundred dollars for myself and each of my near friends to be insured that my own body and theirs shall be thus carefully cared for after supposed death, and also agree to pay another hundred dollars or more in case that after being carried to the mortuary consciousness shall return, and I think there are thousands of people in Boston alone who would be glad to do the same. I am quite sure that if any responsible Life Insurance Company or Crematory Company or corporation organized for the purpose will undertake to thus insure against premature burial or cremation, it will not only do a great work for humanity, but be largely rewarded by a great financial success.

GEORGE T. ANGELL.

Charity begins at home, but should not end there.—Old Proverb.

The World Beautiful.

Lillian Whiting, in The Budget.
There was the Door to which I found no key;
There was the Veil through which I could not see;

I sent my Soul through the Invisible
Some letter of that After life to spell,
And by and by my Soul returned to me,
And answered, "I myself am Heaven and Hell."

Is it worth a tear, is it worth an hour,
To think of things that are well outworn?
Of fruitless hush and fugitive flower,
The dream forgone and the deed forborne?"

Seek not the spirit if it hide
Inexorable to thy zeal;
Tremble, do not whine and chide,
Art thou not also real?
Stoop not then to poor excuse,
Turn on the accuser roundly; say,
"Here am I, here will I abide
Forever to myself south-fast,
Go thou, sweet Heaven, or at thy pleasure stay!"
Already Heaven with thee its lot has cast,
For only it can absolutely deal." —Emerson.

Emerson speaks with great significance of "the transcendent simplicity and energy of the Highest Law," and elsewhere he affirms that within man is the soul of the whole,—the wise silence, the universal beauty, to which every part and particle is equally related.

Not are these affirmations of vague abstraction, but, rather, the enunciation of laws that are of the most practical application to our daily life. They offer the solution of at least one of its most vital and perplexing problems, and one that occurs with almost overwhelming force to the more sensitive and sympathetic natures. And this problem is that of the entanglement of one life with another through all shades and degrees of social relations,—of affection, of responsiveness, of magnetism. Friendships are made—and broken. Social ties of all conceivable degrees and aspects change, because they are a part of life, and the very essence of life is movement and transition.

Only mechanical things are at rest. Feeling, emotion, perception, sympathy, response,—all these are in a perpetual state of action and reaction.

That the individual life should be at the mercy of all this maelstrom of human emotion and tremulous susceptibility is totally at variance with any hope of its possessing the power of true and worthy achievement. And yet, more even than this,—the very social relations, the loves and friendships and companionships on which it depends too much, are themselves lessened and lost by this attitude. No one is prepared to live out his best life with another until he can live his best life without that other. It is the law and the prophets. He only is worthy of his friend who can live without his friend.

Yet to a greater or a less degree a vast amount of time is lost, in one way or another, by retrospection and regret, and the baffled effort to open

The Door to which I found no key,
And in endeavor to lift
The Veil through which I could not see.

But why? The Door refuses to open. Has not life something better to be done than to stand idle before a closed portal? The Veil effectually shuts out all that is behind it. No X-ray pierces the mystery. Then it may safely be left, and in the meantime one may possess his own powers in the integrity of their energy and proceed on his onward and upward way. One may send his Soul through the Invisible,—not alone to spell the letter of the Afterlife, but to decipher the hieroglyphic of the Present life, and it will return to him with the same answer that it brought to Omar Khayyam. He who would dwell in Paradise must make heaven and keep heaven in his own thought. It is impossible that one's life—in all its fullness of aspiration, its richness of purpose, its infinite possibilities of achievement—should allow itself to be at the mercy of circumstances over which it has no control; that its power to be something, or nothing, should depend on the actions, the attitude, or the thought of other people. For life is an individual responsibility, and is, in its deepest significance, wholly between one's self and God. Its course should not be deflected by these varied and incongruous influences. All these are weeds to be brushed away. If the spirit

cease to seek it; life is full of interests, full of duties, full of happiness, of enchantment.

Art thou not also real?
Are not one's own purposes, one's own objects, worth attention? The soul looketh steadily forward, creating a world before her, leaving worlds behind her. She has no dates, no rites, no persons, nor specialties, nor merit. The web of events is the flowing robe in which she is clothed."

This then is "the transcendent simplicity and energy of the Highest Law."—to keep one's spiritual poise. The comprehension of the true nature of life, extending itself, here and now, into close relation with the unseen world, is a practical aid, and deepest of all that aid involved in the perfect recognition and acceptance of the magic words—"Thou wilt keep him in perfect peace whose mind is stayed upon Thee."

The Brunswick, Boston.

Gems of Thought.

Trust men, and they will be true to you; treat them greatly, and they will show themselves great, though they make an exception in your favor to all their rules of trade.—Emerson.

In the life of obedience God leads us by many chains. There is the chain of duty, the silver chain of hope, the golden chain of love. It is ours to choose the chain. Most of us mix the links.

Our tempers, our passions, our inward temptations, our pride and vanity, the self love and the jealousies and the multitude of inward faults of which we are conscious will master us little by little unless we master them.

Live in a thankful spirit, and you will find more and more to be thankful for. Begin by resolving not to forget your mercies, and you will gradually come to feel the thought of them a constant inspiration of happiness.—Brooke Herford.

Some people are so afraid to have convictions lest they become bigots, but there is something worse than bigotry, and that is to have no conviction of your own except one made to order and pumped into you by your neighbor.—Arthur Fowler.

Matter has its laws, but the laws of mind are stronger, can overcome those of matter; and over all is spirit with its laws, breathing through mind and matter and moulding them in its own likeness.—Selected.

Those who are really happy are usually those who are really good. The bad, wicked, vile can never feel the fullness of joy that comes to the heart of the weldoer. To be good is to live temperately, industriously and honestly, and to be always learning something new and useful. All who do these things will find the true secret of happiness.—Elmina.

Are we doing our share in making the world better? Are we doing anything in that line? There is certainly need of such work. We have possibilities and capabilities of service. How have we improved these within the past week? It may be well for us to face squarely our duty, and to consider fairly how far we have met it. It may be that this will lead us to do more the next week.—Sunday-School Times.



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Internally—A half to a teaspoonful in a tumbler of water will in a few minutes cure Cramps, Spasms, Sour Stomach, Nausea, Vomiting, Heartburn, Nervousness, Sleeplessness, Sick Headache, Diarrhoea, Colic, Flatulency and all internal pains. There is not a remedial agent in the world that will cure fever and ague and all other malarious, bilious and other fevers, aided by RADWAY'S PILLS, so quickly as RADWAY'S READY RELIEF.
50 Cents a Bottle. Sold by Druggists.

Be Sure to Get Radway's.

Brilliant.

Sinful thoughts and willful ways,
Love of self praise and human
Faints that let and will not leave us,
Though their staying sorely grieve us.
Help, oh, help us to outlive them!
Christ, atone for—God,

Poetry.

EASTER LILIES.

Easter lilies, soft unfolding,
Emblems of eternal love,
Close within their chalice holding,
The truths below of Christ above.

Easter lilies, sweet exhalings,
Let your incense rise today,
To our Lord, who never failing,
Leads us o'er the thorny way.

Easter lilies, life infolding,
Open and seed for future time,
For our life-gems are moulding,
For the future life sublime.

MARY E. LEWIN.

THE TRAILING ARBUTUS.

(Easter's Flower.)
Through the black woods I go
In early Spring;
My path my feet I crush
A fragrant thing.

Through the leaves aside,
The damp, dead leaves;
And there, like life in death,
My startled gaze perceives
The pilgrims' sweet May flower,
To blush, my heart!

The message Easter brings
Of love and life of Spring
To lovely blooms impart—
"Forget your foolish fears!"

The message thou dost bring,
Bright morning star!
After the night the light,
In radiant realms afar!

The message Mary brought:
"The Lord is risen!"
He shall release His own,
At last from death's dark prison.

Susan L. Emery, in Donahue's Magazine.

FROM THE CLIFF.

Here on this ledge, the broad plain stretched
Below.
The calm hills smiling in immortal birth,
The blue sky whitening as it nears the earth,
Afar where all the summits are aglow,
I feel a mighty wind upon my brow,
Like God's breath, kindling in my soul a birth
Of turbulent mists struggling to break forth.

I pass with Dante through eternal woe,
Quiver with Sappho's passion at the goal,
Tremulous splendours of unutterable light,
And know supremely this, O God—thou art,
Feeling in all this tumult of my soul
Grand kinship with the glory of thy night.

—Richard Hovey.

THE WINDS.

When sluggish lags my pulse, I plead
The rigorous North will rouse and blow,
Clearing the far horizon's blur,
Starting the sun from behind the fur,
And bringing for mine earnest need
The bracing tonic of the snow.

When I incline to dreams, and faint,
With half-shut lids, would lounge and see
The thoughts swing languorously above
To low, thrush-like litanies of love,
And ripples goldenly the grain,
The south for me! the south for me!

When melancholy suits my mood,
I long to sit 'mid fading leaves,
The misty East descending in pain
In its thin mist, and the rain,
With anemic sorrow imbued,
Make plaintive patter round the eaves.

And when the pilgrim zest is strong
For brackened pathways mountain high
Along the hill slopes to the crest,
Then would I have the ardent West
Fling his hissing and welcome song,
To me his old ecstatic cry.

So with the veering winds that sweep
The empyrean I am one;
Feeling close kinship unto each,
Soul-sympathies of spirit-sweep,
Blow they or shrill, or low, or deep,
Across the face of God's white sun!

—John Scollard, in the Youth's Companion.

RICHARD YEAND-NAY.

Well named the hero and well named the book,
Such contradictions mark its every page.
As if the painter for his pigments took
The sweetest things that can the heart engage.
And with the fondest mixed them, mostly blood,
Of sorrow, much, and words of evil spell!
The good submerged with an Augean flood,
The love with hate too venomous for hell!

But there is worse to blame; that one so fair
As Richard's love should so perversely be
Condemned to loathsomeness beyond compare,
Of all her claim denuded utterly.
Forgive this treachery they may, who dare;
So would not Richard, and so will not we.

—John White Chadwick, in Saturday Times Review.

AN OFFERTORY.

Offerings of prayer and love
Lord we give to thee above,
At thine altar these we bring,
Humble gifts to thee, our King.
Lowly do we bend the knee
In supplications to thee,
Hear our voices, Thou Most High!
Eisen Lord, beyond the sky,
Give us grace with love accord,
We thy children ask it Lord,
Teach each heart thy words divine,
Fill each life with deeds like thine,
That our souls may come to thee,
From all sin and sorrow free,
Hear our voices, Thou Most High!
Eisen Lord, beyond the sky.

LOUISE LEWIN MATTHEWS.

Easter 1901.

THE SOUL OF CHILDHOOD.

Then, like a newly singing bird,
The child's soul in her bosom stirred,
I know not what she sang,
Because the soft wind caught her hair,
Because the golden moon was fair,
Because her heart was young.

I would her sweet soul ever may
Look thus from those glad eyes and gray—
Unfettered, undefined,
Low her when her face I see,
Her simple presence wakes in me
The imperishable child.

—F. W. H. Myers.

"Count that day lost," the coal man cries,
Whose slow descending sun
Set at its close, when twilight dies,
No shortage in a ton."

—Philadelphia Record.

The jeweler says: "One
Needs scarcely be told
The setting of the sun
Is usually gold."

—Philadelphia Press.

He said that he was tired of life,
To die was just his wish,
And so he straightaway started out
And bought a chafing-dish.

A barber says a woman can't
Dress straight because she squints;
But just the same she's accurate,
When it comes to throwing hints.

—Chicago Daily News.

The chirping robin now we hear;
His note is rather faint,
And we're not sure that spring is near
Till we see signs of "Paint."

—Philadelphia Record.

Miscellaneous.

Shiwo San's Pilgrimage.

The village was planted on the crest of the pass, so the people who came and went were mostly out of breath, and would not talk much of that which they had seen on the road. Nor did it console with the dignity of the priest's mother to sit and chatter with chance comers, but a casual seller would have been welcome to her, for she was often in doubt how to act.

It was a source of great perplexity to Shiwo San that such a priest as her admirable son should be afflicted with such a son as her abominable little grandson. There were many boys in the village, and boys were lumps, as everybody knew; but such an imp as the priest's Kokichi, the elders vowed, had never been begotten in Azuma yet. He was the scourge of the school, master, the plague of the policeman, and the only trial that had ever troubled the O Bassan's calm approval of the ways of the gods. Not for her was it to say that they might have made her rich instead of poor; that, considering her daughter-in-law was dead, they might have left her more eyesight for the sewing; even her rheumatism left hand she would have passed over in silence, for was it not a testimony to the honored age which, thanks to their clemency she had reached? But Kokichi almost shook her faith. A boy of eminently respectable parentage, who still tore his hair and pulled at his ears, the inspector's cat, and could only write characters of five strokes at the age of ten, was almost an argument for fearing that the gods, as well as the spirits of Kokichi's ancestors, were growing careless in their old age. Kokichi's father did not allow the O Bassan to speak much of the gods, being himself a severe Shintoist. But the O Bassan had her own thoughts about that. All her veneration for her elder son could not make her forget that she had prayed to Kwannon Sama for a priest son long before he came into the world, and that when he was a tiny scrawled cotton bundle that could not hold up his head she had carried him on her back to get the blessing of the eleven-crowned goddess. So, though she never contradicted his theology, she said her prayers and took her bits of offerings to her old friend all the same.

The last time she had visited Kwannon's temple the wise nun who lived there had advised her to try the liberating blither for Kokichi's wickedness. Shiwo replied that it had been applied when the slimmer was quite small, but that instead of letting the devil out of him it appeared as if some new demon had taken advantage of the opening to enter and remain.

"Well, O Bassan," the old nun replied, shaking her bald head till it shone in the sun, and one of the temple pigeons tried to poise on it, "if the blither does no good there is nothing for it but to try another pilgrimage. Let me see, where did you go last time?"

"To Zenkoji," replied Shiwo, "but there was a fire there just afterward, and the answers to the prayers must have got mixed up. I had a present from my married daughter, a mosquito net, and some bean curd, and she had another son; but Kokichi's naughty than ever."

"Go to Nikko and pray there," said the nun; "the spirit of Gongen Sama will grant your request, and the evil child will become pious and docile."

"I will try," said Shiwo, looking discouraged. "If it is possible I will do as you advise, but there are many difficulties. I must have a horse, and I beg you to pray for me and to accept my present, a worthless pine needle, too small to offer such a distinguished person."

She produced a white wooden box with plaited rushes dividing it into green squares, in each of which nestled a new shawl. Then she trotted off, and began to mount the long hill to the Usui Toge rather sadly. The advice to go to Nikko had come at the wrong time for her own wishes, and yet her desire for Kokichi's conversion, as well as her regret for her adviser, seemed to indicate that the hour for it had struck. But how much more gladly would the O Bassan have obeyed had some other place been recommended!

The nun could not know that Nikko was the name which stirred all the fire left in the old woman's heart. She, a little girl, Shiwo had run away from home (when "home" was much nearer to the sanctuary than it was now) with a band of other children. They had begged or borrowed enough for their small needs, and as well as her regret for her adviser, seemed to indicate that the hour for it had struck. But how much more gladly would the O Bassan have obeyed had some other place been recommended!

Shiwo had not forgotten her vow, and as she began to grow old she made visits to other shrines but kept her second pilgrimage to Nikko for the last of all, because it was so far away that she could not hope to reach it twice. A small sum of money, saved into the sleeve of her best kimono, was reserved for the journey; if the gods were kind and answered her prayers, there would be no expenses for her return.

But although the vow was now fifty years old the O Bassan had no eagerness to quit this life. Even Kokichi's terrible wickedness could not destroy her conviction that a respected old lady, the mother of the priest, with a sound roof over her head, food to eat and sunshine to sit in, was every happy person she looked at. She had looked forward to a good many years more of such tempered bliss. Of course, if nothing else would do Kokichi any good, the journey to Nikko must be accomplished, but she still had a hope that the gods' answers would answer her purpose. The eggs were so beautifully fresh.

With many halts for rest she reached the top of the pass, and sat down in the deserted tea shed. From there she looked out over the wide silver-threaded plain, on whose northern side rose the hills that held the tomb of Iyeyasu of Gongen Sama, the great saint. So many years had passed since she was there that she almost wondered if it had outlived them. Were those misty chains of purple and silver indeed the hills where she had gathered pink lilies fifty years ago? Well, and she took the gods into consideration she would soon have to go and see.

The night was already shadowing the street when Shiwo reached her son's house. It stood within the temple court, and that was none too spacious for the temple itself was poor. As Shiwo entered the gate Kokichi came running to meet her, looking so bright and good that a thrill of hope made her forget her weariness. He was a wiry lad, with piercing black eyes wide mouth laughing away from his beautiful teeth, and a shock of coarse black hair standing quite straight out from his head.

"Welcome, O Bassan," he cried, with such unwonted politeness that the old lady could hardly believe her ears. "I have good news for you!"

"What is that, my boy?" she asked, laying her knotted little fingers on his head.

"Another present has come for you," he replied. "Such a beautiful one!"

"What is it? Where have you put it?" she asked delightedly.

Kokichi took her hand and led her toward the back of the house. Just then a large black cat, with a lump of fur where its tail should have been, darted out from under the step and came to greet the O Bassan, passing Kokichi with something like a hiss. The child stopped short.

"Who has taken off the cat's collar?" she inquired sternly. When she left home the creature was wearing its red and purple frill as usual.

"We will find it directly," replied the boy. "Now, shut your eyes, and when I say, 'Look,' then open them."

The O Bassan obeyed to humor him.

"Now, look!" he shouted suddenly, so close to her ear that she almost jumped off the ground.

A terrible sight met her eyes. Black and bleeding, with outward wings, a large crow had been nailed to the shutter. Round its dead neck was the cat's best frill. Kokichi was already disappearing with a whoop over the fence.

Her fingers trembling with anger, her face

looking as if it were eighty years old, Shiwo got to the collar of the grinning bird and returned to the front of the house. There she sat down on the step and her cat came sidling toward her. She put the collar on its neck and held it to her for comfort, while from her dimmed eyes fell a few of the slow, bitterly pained tears of age.

Then it was time to get the priest's supper and put the house in order for the night. She was not one to permit her death knell to interfere with things of real importance. Soon the kettle was swinging over the fire in the floor, the pith wick floated, a little tongue of light, on its brass platter in the paper lantern, and the china bowls and cups were placed on the tray. She thought at first that she would give Kokichi no pickles for his supper; then she remembered a saying in the "Book of Universal Maxims": "If thou feed thine enemy, let a double portion be his, for a full stomach softens the hard heart." So she put a big red pepper in Kokichi's saucer among the bits of daikon, whose smell already ravaged the house and seemed threatening to displace the roof. It was a pleasant and wholesome stink in the nose of the O Bassan.

When the priest came from closing the temple for the night his house was shining like a lantern itself at the end of the narrow courtyard. The window on that side was shaped like a peach and latticed in a fanciful bamboo pattern. Through the paper the moon shone dully golden, and a shadow passed behind it as he looked, the shadow of a little old head with short hair drawn down under a comb.

As he entered his mother smiled politely, bowed her head almost to her knees and murmured, "O kaeri" (honorable return), for she had strict ideas of what was due to the head of the family. The priest dropped his sandals on the step and came to take his place near the fire.

"How goes it, mother?" he asked kindly.

"Have you had any more pain in your hand this evening?"

He was a stout, pleasant-looking man, dressed with scrupulous cleanliness. His head, of a strange pointed shape, was shaved pitilessly close.

"No, Kito San," she replied, "not in my hand, but in my heart much pain because of my impious grandson. But pray delay to eat first and we will speak of him afterward."

Kito San, deeply, bowed his head, and turned to his food, for that would at any rate give him energy to expostulate with the criminal.

A few minutes later Master Kokichi came in, looking sulky and defiant. He expected to be sent to bed with only half a supper, and great was his surprise to find it more generous than usual. The red chili especially touched him, with something like remorse. He remembered it all his life.

At last Kokichi, having taken his lecture with unexpectedly good grace, went to sleep off the daikon under his grandmother's new mosquito net. She and her mother, who had been a little reproachful about his conversion, and who had been persuaded by the priest to let her start off at once to try and obtain his conversion by her prayers. Kito knew nothing of the old vow. He said that she was terribly troubled about her son, Nikko was a very boy place, and he thought at any rate it would soothe and please her to go there.

"If only some of our friends were going!" he exclaimed. "At your honorable age it is too far to travel alone."

"Yes," she replied, "but there are longer journeys." Then, after a moment's silence, she seemed to have an inspiration. "My son," she said, "I will take Kokichi! The sight of Nikko will surely open his eyes to his sins! I myself—when I was a child—"

"I know, I know, mother," said the priest—he had heard the story of that visit so often that he knew it by heart—"but the boy will worry you to death, and get lost fifty times on the road."

"I will take Kokichi," she repeated firmly.

"Do you think I would leave you alone with him as he is now? And I will speak to a neighbor about coming in to do the cooking and cleaning."

"Shall you be away very long, mother?" asked the priest.

"It may be long," said the old woman, bending over to dry a tea-cup. Then she went and pulled the mosquito net over Kokichi's head, which he had kicked out from under it as he lay on the mat.

The wife of the charcoal merchant was surprised as she was sliding out her shutters at the first streak of dawn to see the O Bassan from the priest's house come hurrying toward her door on the street. The old lady was carefully dressed in a clean blue gown, kilted up for a journey. Under her one skirt, the color of skimmed milk, flapped in the chilly breeze against her brown legs, and he had a new blue kimono.

"Another pilgrimage?" exclaimed her friend. "What band are you going to join, O Bassan?"

"I will meet friends on the road; I am going to Nikko," said Shiwo, hurriedly. "Will you condescend to cook some food in my wretched house until my unworthy return? My son—" Then she stopped.

"With pleasure," said the kind woman, "you must need an august change of air. Your honorable grandson is a great charge to such a noble age!"

"I take him with me," replied Shiwo. "Please do not let Kito San eat salt fish and daikon at the same meal, they insolently disagree with him. I thank you for your kindness, and I will humbly pray for you at Nikko." And she turned away.

"Do bring me a pair of monkey fur slippers for my little girl!" called the other woman after her.

"I will send them," Shiwo answered in her kind, cracked voice.

"Why should she do that?" thought the charcoal merchant's wife, "does she mean to stay there forever?"

Two pilgrims sat down on the stone steps that led from the back of the temple to the solitude of the hillside where Iyeyasu's bones lie deep and quiet in their scarlet caskets. Behind them were the shadowy courts and heaven-climbing stairways, the regal darkness of the pine groves and all the gathered glory of the hundred shrines; before them, the grass full of wild flowers, the waving woodlands, and the sky. The old woman leaned back against the gray balustrade, and closed her eyes for a moment. She looked very tired, but at peace. Fifty years had she looked out from the temple, and she was now a little soul adored with beauty. She had found it all again, and more glorious than she remembered it.

"Will you eat, grandmother?" said Kokichi, opening out his little store on the step.

"No, my son," she answered, "eat, I have no hunger."

She watched him while he enjoyed his meal. He had been wonderfully good all this time. But Shiwo was so tired that she doubted if she would have been able to go back to the Usui Toge, and for again reaching Nikko with this body it was not to be thought of. She stopped down and loosened her ravelled sandals and dropped them over the low wall. They would not be needed again. The little old woman, who had been so long and carefully followed, one addressed to her son, the other to the august authorities of Nikko.

"Have you finished, my son?" she asked, as Kokichi leaned back against her knee with a little grunt of content. "If so, pack up the rest, it will do for your supper. And now listen to me."

Kokichi looked up, surprised at her grave tone.

"Here are the fur slippers for O Suda San's little girl," she said, laying down a parcel on the stone. "And this paper of dried fish is for the cat, don't forget! We can't almost all the way on foot, but here is the money for you to go back in the train. You will like that, won't you, Kokichi?" she asked, stooping down and looking into his face.

"Of course," he said, with a delighted grin.

"Well," she went on, "this letter is for your august father, this for the guardian of the gate. Now go. Be a good boy, Kokichi, promise me that. Obey your father, do your lessons, take care of your clothes, and please, please be kind to the cat."

"But you, O Bassan," said the boy, "what are you going to do? Am I to go home alone?"

"I wish to remain a little longer," she replied, "and you have already been more than two weeks absent from school. Take your ticket for Takasaki and walk up from there, it will be cheaper."

"Very well, O Bassan," he said, "this has been a nice journey! Come home soon, and I will really be good till I see you again."

Once more she laid her hand on his head and

looked down into his jolly, naughty face. He made her a proper bow before he went, and she felt that the reformation of Kokichi had begun.

A little boy with a kilted coat and a bundle tied to a stick put a letter in the guardian's hands at the outer gate, and then started to run down the hill to the railway station, which was far more interesting to him than splendid temples. The guardian read the letter and looked a little surprised. It ran thus:

"Honored Sir—, the mother of Kito San, priest of the temple on the Usui Toge, having come from far to visit Nikko in my old age, have made up my mind to remain here, seeing that if I depart from this glorious spot I shall never have strength to return to it. If Your Honor will use these two yen for the burying of my unworthy body in this happy place my spirit will remain here, and will always pray for your prosperity."

It was not till quite late in the day that they found her, a decorous little blue figure, lying back against the steps, with her sash tied round her knees, and her pretty blue towel bound over her face, which was turned toward the resting-place of Iyeyasu. Her penknife was on the stone beside her, and there were no ugly marks, only a tiny stab in her throat. Her spirit was doubtless tired after the long journey, and had slipped out of its prison with ease.

I passed through the village on the Usui Toge years afterward and stopped a woman at the temple gate to ask after Kokichi and Kito San. When she spoke I saw that it was O Suda, the wife of the charcoal merchant.

"Kito San is now a happy father," she replied, "for Kokichi San is at the top of the class and will certainly be a schoolmaster. Did the Oki sama indeed know Shiwo San? She was a good woman!"

A huge tallest cat, with a splendid red and purple collar, was purring in the sun on the temple steps.—Mrs. Hugh Fraser, in the Sphere.

Youth's Department.

Between Two Loves.

A Story of Cornish Children.

The sorrows of the little people are, if less lasting, more acute than the sorrows of the grownups. When Sam Nichols, who has been adopted by Dicky Wade, was eight years old, he still possessed a wonderful doll. Of course, it is an unusual thing for a boy to keep a doll, but even a boy must have something upon which to vent his love. Dicky Wade, being a game boy, and dogs professionally, and did not keep one. He justified his objections to them by the terms in which they are mentioned in the Bible, but his real reason was a professional one. So Sam's doll had been one of the powers of the habit of hunting hens into a cul-de-sac formed by the winding of a brook. Then it struck him that most hens had reddish-brown feathers. According to an old colored dog-terrier type, his mother's hair had been of that color, so he felt sad and begged pardon of the hens, of whom he then tried to make pets and friends. But apart from a recollection of the hunting, the hens continued shy. Therefore Sam lavished his love on the doll, or rather on what remained of it.

"It had been one of those wooden dolls, cut out of a piece of pine, with black hair painted in bands, blue painted eyes, and crimson painted cheeks. The arms and legs used to be of wood and attached with wooden screws to the body, so that the result had once been a very imperfectly jointed figure. Now arms and legs had gone, leaving four gaping holes. A weekly washing with hot water, soap, and a scrubbing brush had made the complexion and the hair vanish, and had blinded the beautiful blue eyes."

"You're getting to big boy for these doll Sam," said Dicky Wade. "For boys, to be no kind of play. E'f'ed dead want gun, or boat, or sword, or spade, I'd not mind. But dolls be not fit for boys."

Sam only hugged Guinevere—pronounced "Gwin-ey-er"—and said, "I'll keep her till I'm a man."

"E'd better throw 'n away," continued Dicky, who used to preach at the little chapel at Trebarrow. "For 'tes borne in upon me 'tes a graven image, an' does smack of the Scarlet Woman!"

"Her's not scarlet," said Sam. "Her's as white as snow with soap an' hot water."

"Tes not thievery scarlet I be thinkin' on. Beware of 'doin' it, boy. Betchink 'ee of the brazen calf 't the children of Israel ded set up."

"What's this I do hear of 'ee, young Sam Nichols?" said Father Fard of Trenale, next Windlingford market day. "Is 't true that you've got a doll just as if you were a little girl?"

"Iss," said Sam, so lenity.

"I'm 'shamed of 'ee—a boy of your age. When I tharred 'ee for stealin' my apples, 'ee were a good plucked 'un. An' good plucked 'uns don't keep dolls."

"I be daggin' for somethin' to be fond of," growled Sam.

"Give 'ee a bull pup, grandson to my old Pinchee," said Sam, exultantly. "I should like 'n very much."

"You shall have him then. But throw that old doll away!"

"I won't do thievery," said Sam.

"I'm surprised at you, Farmer," said Mrs. Nale, "offering him a dog. It's time he was put to work, and then he'd get the maggots out of his brain. Let Dicky Wade send him over on Monday early to scare the birds, and he'll have no time to do no more."

"I won't give 'n up," said Sam. "But I'ded know 'ee'd complain, Mrs. Nale, when I'ded ded spake of givin' anything away."

"You ruddy little boy!" cried the sharp-nosed Mrs. Nale. "Won't have you on our farm for anything now?"

Farmer Nale winked disconsolately at Sam. The wink conveyed that they both knew Mrs. Nale and her ways, and that the farmer only wished he might speak as freely to her as Sam could. But he sent the pup after all.

"E's at Trebarrow," said Jack Chown, when he met Sam on the Clays, as they were both bound for the old school, "that 'ee've got a doll to home that 'ee do nurse like as 'ee 'ee was a maid!"

"What be that to you, Jack Chown?"

"Tes true, e's 'n? You gert baby? You're no better 'n a maiden, be 'ee, then, Miss Nichols!"

And the boys around took up the call—"Miss Nichols! Miss Nichols!" And they pointed the finger of scorn.

The little old man inclined to cry. For it is hard at the age of eight to be likened to that inferior creature, the maiden. To be called a lion or a tiger or a wolf, or by another Cornishman—a chough, is a compliment. But to be called an ass, a goose, a dog, (for Jack Chown cannot tell, unless the authority of Dicky Wade and the Bible), a chough—by a Devonian or a maiden, is a deadly insult. Sam gulped down the lump in his throat, held back his tears, and smote Jack Chown a mighty blow that sent him to school with unusual punctuality and a bloody nose, all for the honor of Gwinger.

And then it chanced that Sam met Allee Treweekes, the seven-year-old daughter of the parson. She was spick and span, in a white dress and a cream Leghorn hat; but Sam remembered—aday when her frock had been torn, her shoes muddy, her mouth blackberryed and he had stolen apples for her, and a thrashing had followed.

"Now be 'ee, Miss Allee?" said he.

"Very worried, Sammy. Jus' like mother at spring cleaning."

"How be thievery, missie?"

"I hear you have a doll. I have a doll, but then I'm a girl. I don't think I can ever love a boy who has a doll."

Then bitterness seized Sam. To be called a maiden was the direst insult. Yet his ideal was a maiden, Allee Treweekes.

"I have got a doll—my Gwinger. An' I do love 'ee. But I don't love 'ee any less for thievery."

"But it's only girls who have dolls. It's not mainly for boys to have 'em. I won't ever love you anymore, an' I won't ever kiss you any more, so long 's you keep a doll."

Then began a struggle grim and great in the heart of Sam. And it was the harder to bear that it was inarticulate outwardly and inwardly. For the good and the bad did not marshal themselves within him as the advantageous and the disadvantageous would have done within a grown-up child. He did not see clearly. He only felt the pain.

At last he said, "Here be a match. Do 'ee make fire on the grass while I do go fetch Gwinger."

When he came back the dead branches were

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crackling merrily on the grass between the stone hedge and the road, and Sam laid the dimly mantled boy in the flames. He had never heard the name of it, but he understood the feeling of suite. He watched and watched till nothing was left of Gwinger; then he threw himself face downward on the cool lush grass and sobbed passionately. Allee, who had been watching him curiously, was overpowered by the feelings she had raised. She crept slowly to him and laid her little hand on his shoulder.

"Don't cry, Sam," she said. "Be a good boy, an' I'll give you a kiss."

"Go away. Go right away. I'll never spake to 'ee again. 'Ee've made me burn my Gwinger. I ded et for you, an, now I do hate 'ee. Go away."

And, half frightened at what she had done, half pious in realizing so early the power of the woman over the man, Allee went. Sam lay sobbing, and dimly discerning somewhere in the back of his head that, if the choice were again put to him, he would again choose in the same way.—Stanley Ellis, in the Pall Mall Magazine.

Daniel H. Soule of Phillips, Me., has bought from Hood Farm, Lowell, Mass., a young bull by the great Merry Maiden's son. His sire is by a son of Brown Bessie and out of Merry Maiden. At the World's Fair, Chicago, Brown Bessie won the ninety and thirty days test against all breeds. She made more butter in a day, a week, a month and throughout the entire period of the test than any other cow, and averaged over forty pounds of milk per day for the five months she was there. Merry Maiden was the grand sweetest-tempered cow as the best individual cow in any breed, all three tests combined. She was also the only Jersey that proved herself superior to all cows of all other breeds in all tests. Mr. Soule's bull is of sweet temper, a young cow of great promise. She carries a fine udder, set off by teats of the right size, squarely placed.

The society of California pioneers has determined after careful investigation that Jan. 28, 1848, was the exact date of the discovery of gold in California by James W. Marshall. The gold was found in the rocky bed of the tailrace of the Sutter saw-mill at Coloma, on the south fork of the American river.

—Snow sells in the north of Sicily for about one cent a pound. It is a government monopoly, and the Prince of Palermo derives the greater part of his income from it. The snow is gathered on the mountains in felt-covered baskets, and is sold in the cities for refrigerating purposes.

Home Dressmaking.

Hints by May Manton.

3785 Sacque Chemise.
32 to 42 in. bust.

Every woman recognizes the comfort of an undergarment that involves no unnecessary fullness and does not add to the apparent size. The simple little chemise illustrated is designed to cover just those conditions, and can be worn beneath the corset or outside, serving as a corset cover, as preferred. The chemise is cut on simple lines and shaped to the figure by means of curved under-arm seams. The arms eyes and edge of the neck are simply turned over on the right side with the lace and beading stitched over the edge. The lower edge of chemise can be finished with a hem or straight frill as preferred.

To cut this chemise for a woman of medium size 23 yards of material 32 inches wide will be required.

The pattern, 3785, is cut in sizes for a 32, 34, 36, 38, 40, 42 and 44-inch bust measure.

3779 Fancy Waist.
37 to 47 in. bust.

The foundation is a lining fitted to the figure, and which includes under-arm gores that are covered smoothly with the material. The back is plain and smooth across the shoulders and is drawn down in gathers at the waist line. The fronts are slightly full at the shoulders, and are finished with soft revers that give a tapering effect. The centre front, or plastron, is soft and full, and is attached to the right side of

the lining and hooked over the left. The sleeves are in bishop style with moderately deep cuffs, and the neck is finished with a stock collar. When the waist is made unlined, the plastron is stitched to the right front beneath the revers and hooked to the left.

To make this waist for a woman of medium size 23 yards of material 21 inches wide, or 2 yards 27 inches wide, 23 yards 32 inches or 2 yards 44 inches wide will be required.

The pattern, No. 3779, is cut in sizes for a 32, 34, 36, 38, 40 and 42-inch bust measure.

The Horse.

Providence Notes.

Saturday afternoon I dropped in on Secretary Dexter and looked over the list of entries to the early-closing stakes to the Grand Circuit meeting on Aug. 26-30. As I predicted the list is a big one, as 184 nominations have been made to the six stakes, and the saying "Banner Meeting" had goes. I was rather surprised to find that the Park Trot, 2:10 pace, for which \$10,000 is hung up, drew so many nominations. Just thirty-one nominations were made in that event, which shows that the class made a hit with the side wheelers. It costs an owner \$500 before he turns his horse in this stake, but even the sum did not prevent the record number of nominations.

At one time it was thought the association made a mistake in hanging up so much money for the pacers, but the wisdom of their ways is now demonstrated. The list of horses named is a fine one, containing as it does some likely side-wheelers, quite a number of whom I saw get their present records. If you should ask any of the local followers of the game which pacer he remembers most distinctly, he will doubtless say John T. (2:08), for the pacer, driven by Lester Dore, cost the local fans quite a bundle of money at Readville at the Grand Circuit meeting in August. It was in the 2:14 pace, which was a seven-heat affair, and one of the toughest I have seen in years. *Winola* was backed by the Providence people, as she is a local mare. John T. won.

The Roger Williams 2:14 trot, for which \$10,000 has been donated, has as nice a field of trotters as you want to look at, as twenty-eight nominations have been made. This is eight more than Readville had for its \$10,000 trotting stake. Outside of the big stakes, the 2:25 pace has the largest number of nominations, thirty-five, and one local pacer, Nancy S., a likely daughter of Debut, is entered. The Mariposa Stock Farm of Pawtucket has made two nominations to the Roger Williams Stake, naming *Consuela S.* (2:13) and *Wiseburn*. The former mare got her present record at Readville last fall where she won in straight heats. The Pleasant Valley Stock Farm, Tobias Burke, has named Betty Hamilton in the 2:20 trotting stake. This is eight more than Readville had for its \$10,000 trotting stake. Outside of the big stakes, the 2:25 pace has the largest number of nominations, thirty-five, and one local pacer, Nancy S., a likely daughter of Debut, is entered. The Mariposa Stock Farm of Pawtucket has made two nominations to the Roger Williams Stake, naming *Consuela S.* (2:13) and *Wiseburn*. The former mare got her present record at Readville last fall where she won in straight heats. The Pleasant Valley Stock Farm, Tobias Burke, has named Betty Hamilton in the 2:20 trotting stake. This is eight more than Readville had for its \$10,000 trotting stake.

There seems to be all kinds of rumors afloat as to where and how the string of the elite comes to Readville will be disposed of. I have it on good authority that the entire string will be shipped to Cleveland to be sold at the Fasig-Tipton sale. Colonel Goff has accepted the invitation of the Road Drivers' association to act as judge at the speedway parade in New York on May 11. He will judge the one and two-man wagons, also the best rig driven by a lady. Quite a number of the regulars intend to take in the parade, and yours truly will be on hand.

I took it in last year, and it was well worth the journey. Colonel Goff has shipped his string to Johnny Dickerson at the Goshen track, where the horses will be fitted. Am sorry that Geers could not handle Lady Geraldine this season, as he understands the mare perfectly. Is there a trotter he does not know?

One of our writers on the daily papers is again deploring the racing on the avenue for money. He quotes the New York association tabooring racing for cash on the speedway, and implores the local association to take steps at its next meeting to suppress the crime. While there are some road races which would never be missed, I am of the opinion that if owners wish to race they will bet something on the outside, just to make it interesting. If a horse is a horse, but as I have said before, why advertise the fact? It's one of those cases where silence is golden.

The catalogues for the dispersal sale of light and heavy harness horses of the Woodlake Stock Farm, which event is scheduled for May 28 and 29, are out, and the book is complete, giving, as it does, a full description of each horse and its pedigree. Mr. Dexter hoped to get the Bannigan string, but it looks as if he won't.

The matinee and parade committees will meet this week and get down to work. The latter committee has not an easy task, but as the committee comprises some live men I guess they can be trusted to make the event a success. The matinee committee has lots of time to spare, but I understand that something is in the wind towards founding a driving club in connection with the driving association. Hope on.

Trainer Pierce of the Mariposa Stock Farm is up in Canada, and will ship 15 colts to the track this week. The farm has engaged 35 stalls and has two large buildings to itself and will employ 12 men and a cook.

The avenue is beginning to be rather lively. The warm weather of Friday and Saturday brought out the regulars. I noticed Fred Clark, Charlie Rowan, Ed Tillinghast, Knapp Forsner, who will train strings this season, out on the road working out their horses. Quite a number of the boys were out jogging. I opp in on Nate Young the other day and found him hustling as usual. Nate will campaign Goldfinger and his colt Iodine also a colt by Allerton. I notice that Boston has a great list of entries to its Horse Show this week. Will drop down and look them over.

"STROLLER."

P. S. The Narragansett Park track was visited by a fire about three o'clock April 14, but the loss was confined to the buildings. Seven stables were burnt, but they were not occupied. The stables destroyed were A, B, C, D, E, F and G, which are located on the back stretch, just beyond the half-mile post, on the northeast corner of the grounds. The fire was caused by the carelessness of a man whose identity at the present time of writing is unknown. He was seen walking along by a cottage, and according to the latter's story, threw a lighted match near the fence which separates the grounds from the railroad. The fence, which was dry as tinder, caught fire, and the wind drove the flames which soon ignited the stables. The fire department responded, but succeeded only in partially saving stables A and G. B was gutted, and the balance destroyed as was the fence.

The stables were empty, nothing being stored in them. Had the fire occurred a few weeks later no doubt the loss would have been heavier. The buildings were valued at \$2500 each and are fully insured. It is the second time within a year fire has visited the grounds. On Saturday Aug. 31, 1900, on the final day of the Grand Circuit meeting, fire broke out on the stables on the east side of the track, just opposite the head of the stretch. Four horses were destroyed, including *Joe* (2:06) owned by B. Simons, Maud K., a green mare, Ackman Jim and Wilrissa (2:19). The fire broke out so quickly and obtained such headway before it was discovered that nothing availed the efforts of the stable attendants to save the horses. The stables will be replaced by modern buildings.

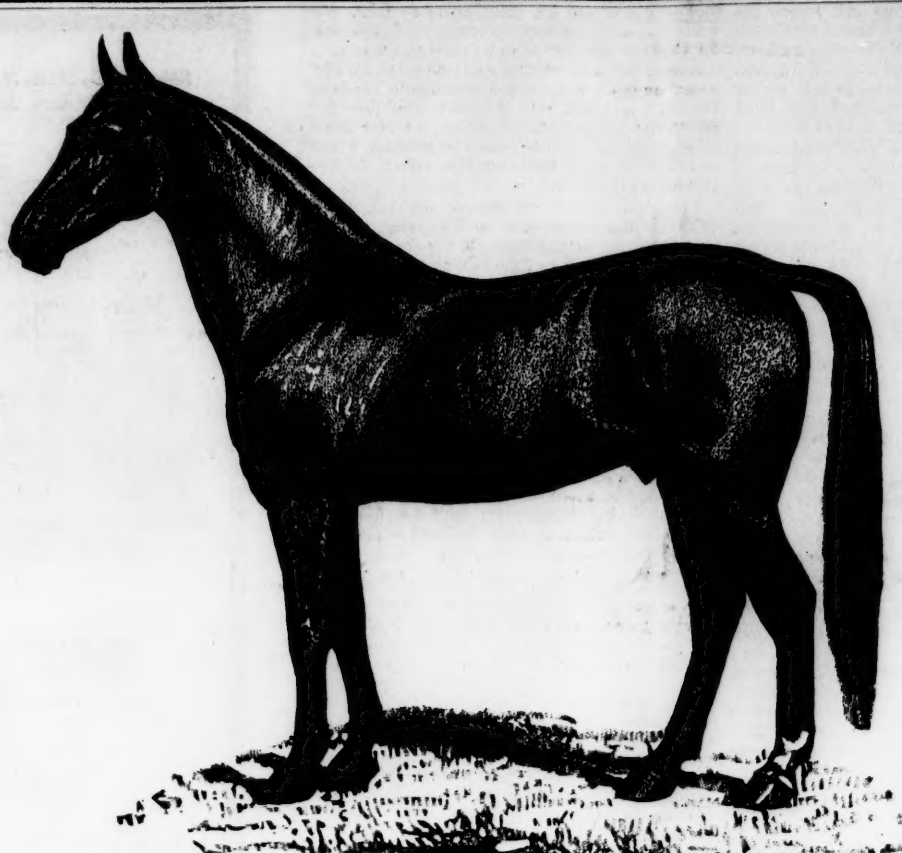
Worcester Notes.

Two weeks of almost incessant rain have given racing interests in and about Worcester something of a setback, and will prevent the trainers who have planned to make the half-mile track at Greendale their headquarters this season from starting work upon their charges quite as early as they had hoped.

The roadman drove out to the pretty half-mile ring yesterday morning while the fashionable folk of the city were wending their way to worship in all the elegance of their Easter creations. A few of the regulars were upon the grounds, having driven out of the city like myself to pay their respects to John Kervick, the veteran Hiram G. Smith and one or two lesser lights who have made an early beginning on the season's work.

John Kervick volunteered the opinion, and every one else acquiesced in his belief, that it would be a week or two before the track would be in fit shape to work horses over. The constant rains have made it little better than a sea of mud, which time and a whole lot of sunshine can only dry out. By the time the track is fit, many of the trainers that have already engaged stall room will begin to arrive, with the prospective money winners of the New England circuit.

There is a movement on foot started by the members of Worcester Light Infantry, one of the companies attached to the Second Massachusetts regiment, to have some horse races and possibly



BELMONT, BY ALEXANDER'S ABDALLAH; DAM, BELLE, BY MAMBRINO CHIEF. FOALED IN 1864 DIED NOV. 15, 1889.

a balloon ascension at the track on the afternoon of the Fourth of July. Some of the members of Worcester Driving Company were for giving races on Independence Day, in addition to the four meetings already scheduled, but the board of directors thought such procedure might offend Westfield track, which gets the July 4 date this year, so the plan was dropped only to be taken up by the militia boys, who are seeking to increase the coffers of the company's treasury. The programme will probably consist of two classes of \$300 and \$400 each, one for slow pacers and the other for the free-for-allers. Athletic events, a few foot races, and perhaps one or two cycle races will round out the afternoon sport, providing the company votes to undertake the enterprise.

E. S. Pierce of Worcester, who has at various times campaigned several good ones, including *Major Winder* (2:09), *Uncle Tom* (2:14), *Sarah Jane* (2:19) and others, has entered in several of the slow pacing stakes on the Grand Circuit the six-year-old green mare *Ruth Leburne*, a mare that has shown great speed at the pace, and is bred right to hold her own in the best of company. *Ruth Leburne* is by Wilton (2:19), out of Rose Leburne (2:21), a mare that has a place in the great brood mare list. Mr. Pierce purchased *Ruth* in Kentucky a year ago last fall, and she was worked a little last season and given two or three trying-out starts in the fall. During the winter she has been driven on the roads of Middlebury, Vt., by Winch, and in the course of a few weeks will be turned over to some first-class New England race driver. *Ruth's* owner has two or three men under consideration, but has as yet reached no decision.

Dr. F. H. Kendrick, during the past week, has received a number of offers for his roan trotter *Moccasin Boy* (2:24), which, by the way, the types of the BREEDER last week made have a mark of 2:13. It wouldn't be a bit surprising if the gelding did get down to that figure in another season, but as he stands today he is eligible to the 2:24 class. One of the offers came from a noted New York horseman who desired to add *Moccasin Boy* to the string he will campaign through the New York State circuit this year.

The Worcester Agricultural Society is still undecided whether it will attempt the management of another fair next September. The society had a three days, old-fashioned cattle show last year, and by opening Labor Day, a holiday, was able to make both ends meet. There is a difference of opinion among the members as to the best course to pursue in this year. If a show is held, the racing committee will open two or three stakes for the colt performers.

Walter L. Ripley will turn over three horses to N. J. Stone, who is to train at the fair grounds. Two of them are young green horses, full sisters, and of great promise. The third is a yearling, *Two Inches* of trotting stallion *Pedlar* (2:18), out of Mr. Ripley's old race mare *Blanche R.* by Achilles, who took a mark of 2:28 to high-wheeled sulky several years ago. With the colts will go the Nubank pacer *Delta J.* (2:17), made last season.

Harry W. Smith, whose tastes runs to the steeplechasers and hunters rather than to the trotters, is working several heavily engaged thoroughbreds over his course at North Grafton for the summer races. Mr. Smith, who always rides his own horses, and is recognized as one of the best gentleman jockeys in the country, won the national steeplechase, valued at a little over \$9000, last fall with his horse *The Cad* and the champion will be out again this year. He has wintered finely and is full of good things. Mr. Smith's first appearance of the year will be at the Brookline Country Club's races over the Brookline course, May 28, 30 and June 1.

Hartford Horse News.

Connecticut horsemen, who were making preparations to campaign their stable in this State, are much disappointed because the "pool bill" did not pass, which would allow pool-selling at race tracks twelve days in a year. The bill came up Tuesday at the capitol, and was reported unfavorably by the agricultural committee, who said the fair associations were opposed to it. The bill was rejected, so there will be no pool selling in this State for two years more, which will make a great many thousands of dollars difference to breeders and track owners in Connecticut.

A number of tracks that had decided to give regular meetings this season (if the bill had gone through) will not open at all, as it is impossible to give a successful meeting, or get entries, unless there is "something doing" in pool selling and book-making. There are more race horse owners in Connecticut at present than there has been in a number of years, and a great many were purchased this winter, as it was thought that the "pool bill" would go through, and that the circuit would be formed and regular meetings held during the summer.

Some of the best tracks in the country are located in this State, but they have had to give up and go out of business since pool selling was stopped some years ago. The Bridgeport track was built three years ago, and it is one of the best located tracks in New England, but after one season, it was closed up and sold at auction. Some of the other tracks that have been idle since pool selling was stopped are New Britain, Hartford (half-mile track), Meriden, Manchester, Windsor, Berlin, New Haven, New London (Groton), Norwich, Willimantic and a number of others in different parts of the State.

Mr. L. A. Fisk, owner of the Branford track, has one of the finest half-mile courses in the

country, and he has spent thousands of dollars improving it, and getting it into shape to hold race meetings this season. He has built a new clubhouse, grand stand, barns and also three miles of railroad to connect with the New York, New Haven & Hartford Railroad, and land passengers right at the gate.

"Knapp" McCarthy, John Cheney, Dave McCleary and one or two others are due at Charter Oak Park, Monday, April 15, with their horses, and it will be but a short time before there will be plenty of sport at the track. The driveway has been put in shape for jogging, and the horses will be worked on it until the track is ready to use. A large gang of workmen are busy, and work will be pushed to get the track in shape by May 1.

Mr. F. R. Bill of this city has returned from a trip in the West, where he has been after horses, which he will use for heavy work. Mr. Bill brought back four teams, and they attract a great deal of attention on the street. Mr. D. H. Bill has two very promising pacers that he will have put in shape for the matinee races this summer. They are called Bobby B. and Ike.

A number of Hartford horsemen will go to Boston this week to attend the Horse Show. Dr. F. A. Ingram will look after the Lawson horses that left Charter Oak Park in charge of trainer "Ras" Ecker to take part in the show. There are twenty-three at Charter Oak Park, in charge of trainer Laughlin, owned by Mr. T. W. Lawson, besides the six at Baltimore and those at Boston, making thirty-five horses belonging to the Charter Oak Stable, and all are in first-class shape.

Mr. A. J. Welch is expected from Lexington, Ky., some time next week, where he has been to make arrangements to secure the "big" race for the Grand Circuit meeting in September at Charter Oak Park. It looks as if The Abbot and Creesee would meet for the first time this season at Charter Oak track on Labor Day. The race will be for \$10,000. If Mr. Welch can make proper arrangements with the owner of *Charley Her* we will get three days of great racing in September.

H. H. Peck will not campaign any horses this season, having sold all his stable at the Garden sale in New York last month.

Harry Bruse, Merit Fulton, Mike Conlin, Joe Dennis, Fred Reynolds, Mat. Dacey, Edw. Bowdoin, Allen Risk and W. L. White will prepare for the Grand Circuit races for the half-mile track this summer.

Frank Goddard will have his trotter *Aqua Dule*, by Dexter Prince, put in shape for the matinee races this season.

Secretary George L. Deming of Moore Park, Windsor, Ct., will give a meeting May 28, Decoration Day.

Notes from New Britain.

Lady Guydon, by Guydon, son of Wilton (2:19); dam, Christabel, by Chimes, sire of The Abbot (2:03), is in foal to Dandy Lambert, by Aristos (2:27), son of Daniel Lambert. This mare is owned by D. A. Harris of New Britain, Ct.

Shorley (2:17) is reported to be in great form this spring. He is in Fred Reynolds' stable at Charter Oak. Fred also has a trotter, a three-year-old by Ashland Wilkes, sire of John A. Gentry (2:00), that is rated A No. 1.

The following clipping from a local paper explains itself:

"POUGHKEEPSIE, April 4. In the burning of the barn of Edward E. Perkins, son of Poughkeepsie, six horses—*Electra*, *Island Queen*, *Lady Rupee*, *Pawnet*, *Princess Dillard* and *Brownie Dillard*—perished. Mr. Perkins had refused an offer of \$2000 for *Island Queen*, and all the horses burned had records."

The mare *Island Queen*, mentioned above, was a very nice chestnut mare, sired by *Island Wilkes* (2:13). Last year, as a four year old, she was driven a mile in 2:13. In her death her sire loses one of his best prospects for 2:10 honors this season.

Voleta (2:23), owned at Highland Stock Farm, has a fine chestnut colt by her side. Great things are expected from this fellow, as he is by *Island Wilkes Jr.* (2:06). Colonel Hinman, manager of Highland Stock Farm, refused an offer of \$200 for him the other day with a remark that nothing less than \$500 would buy this one. He is a very large, lean colt; from his individuality and breeding he should be a valuable one at maturity, and the name *Highland King* would seem appropriate.

H. B. Steward, the genial proprietor of Maplewood Stock Farm, whose address is Newport, Vt., has just returned from a two months trip through

California, having spent two or three days at Palo Alto Stock Farm, and reports a very pleasant trip. He mentions with especial pleasure his visit to this home of Electioneer, and the one place of interest that has done so much to make the American trotter famous. Mr. Stewart is to move his horses to Memphremagog Park soon, where they will receive their care and training from his old driver, George McShane.

Mr. George Haslett has moved his family to Lebanon, N. H., where he will be a great aid to the horse business. Mr. Haslett will be greatly missed in Newport, as he has always been one of the active members in maintaining the horse interest.

Antwerp Notes.

E. C. Willard of the Willard Stock Farm has employed for the season the well-known trainer, Melvin Moody, who has a great reputation as a handler of trotting stock, and with the fine lot of young horses on Mr. Willard's farm ought to bring out some good ones before next fall.

Mr. Moody will also handle a few outside horses, among them a bay gelding owned by John Briggs of Watertown, N. Y., sired by *Waxford*; dam by *Deesive*. This horse is a pacer, has never started in a race, but has stepped a mile in 2:18. Another outsider is a chestnut mare, four years old, sired by Chimes, owned by Charles R. Scott of New York. Another is a brown gelding owned by Mr. Moody, sired by Belmont Prince; dam by *Alouette*; second dam by *Jefferson Prince*. This is a very promising young horse, stands 15.5 hands high; has never started in a race. Can show a 2:25 gait.

Among the horses owned by Mr. Willard is a black gelding sired by *Heroes*; dam, *Kit*, the dam of *Little Eva* (2:24) and *Edward B.* (2:20). This horse has shown quarters in thirty-five seconds, and ought to prove fast. A black three-year-old gelding sired by *Edward B.*, dam, *Molly Downing*, the dam of *Little Leo* (2:17) and *Onyx* (2:23), is another promising one. He also has a fine pair by *Landmark* that can speed fast together, and several other young ones that show well.

April 8, 1901.

A meeting of the New England mile-track managers was held in Boston on Wednesday of last week. Old Orchard, Me., Dover, N. H., Saugus, Mass., and Readville were represented at the conference, and the following schedule was arranged for the season: Mystic, June 17-21; Saugus, June 25-29; Readville, July 2-5; Dover, July 9-12; Old Orchard, July 16-19; Mystic, July 23-26; Saugus, July 30-Aug. 3; Dover, Aug. 6-9; Old Orchard, Aug. 13-16; Readville, Aug. 19-24; Providence, Aug. 26-30; Saugus, Sept. 2-6; Mystic, Sept. 10-13; Readville, pt. 16-20; Dover, Sept. 23-26.

Treat your horse well and he will treat you well. Give him a bottle of German Peat Moss, C. B. Barrett, 45 North Market street, Boston, Mass.

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BUCKEYE PUMP

works easily, throws a steady stream, does not drip or freeze. It is built to last and hence is a valuable purchase. We also sell Wind Mills, Tanks and Gas Engines, besides all Water Supply Goods.

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MERINO, 2.20 Record, 3.20
Sire, ALLESTON (2:20, record 2:04 (sire of 82 in the list at 13 years old).
Dam, CYPRESS (2:24, by Strathmore (dam of Fala, 2:20, Kafa, 4:21, Hatter, 4:18, Imberio, 2:20, Gustine, 2:24, and Belmont (dam of Cypress, 2:24, those producing daughters and one sire); third dam dam of two producing daughters.
Terms, \$30.00 to insure.
McNAMARA & WELLS, Baldwinsville, N. Y.

SEASON OF 1901 **EDGEWOOD FARM** SEASON OF 1901
PEDLAR 12908
RECORD 2:18 1-2.
Sire of Anniellie Pedlar, 2:18 1-2; Trader, 2:25 1-4; Princess of Cedars, trial 2:18 1-2; Cold Cash, p. 2:17 1-2; Oudray, p. 2:16 1-2; Elspeth, p. trial 2:12 1-2.
\$50 with usual return.
EDGEWOOD FARM, North Grafton, Worcester Co., Mass.

...FORBES FARM...
The Champion Stallion Trotter of
...1898 and 1899...
BINGEN, 2.06 1/4
By May King, 2:20; dam, Young Miss, by Young Jim.
TERMS \$100.
Fee for stallion service due when mare is served. Mares kept at \$4.00 to May 1; after May 1 at \$2.50 per week. Address
J. P. HALL, Ponkapog, Mass.

...VILLAGE FARM...
STALLIONS IN SERVICE, 1901.
CHIMES 5348
DARE DEVIL Record 2.09
DIRECT HAL
The greatest sire of extreme trotting speed that ever lived. Sire of The Abbot, 2:06, world's champion; Fantasy (4:20, champion three and four year-old mare); The Monk (4:1, 2:04, showing record of the three, 2:06, 2:08, 2:10. No other sire, living or dead, has three with records averaging so fast.
Sire of five 2:12's, 12 1-2's, 29 in 2:30.
Winner of seven first prizes and three championships at National Horse Shows.
Son of Mambrino King, the greatest sire of 2:10 speed. Sire of three trotters and four five-year-old mares. The Monk (4:1, 2:04, showing record of the three, 2:06, 2:08, 2:10. No other sire, living or dead, has three with records averaging so fast.
Sire of five 2:12's, 12 1-2's, 29 in 2:30.
Other Stallions in service at reasonable fees. Send for Catalogue.
C. J. & HARRY HAMLIN, Village Farm, East Aurora, N. Y.

GOOD RESULTS
follow the use of Ripans Tablets, as in the case of a New York City lady, who writes: "I was troubled with indigestion, constipation and headache for about a year. On getting up in the morning I would feel sick, my head would ache, my bowels would not act and I would be bothered with belching up gas. I tried most every kind of salts for my bowels, but got no permanent relief. At first the salts would act, but I would soon become accustomed to them and be bothered worse than before. My brother-in-law told me how wonderful Ripans Tablets were, and I got a five cent carton and took them, and was more than surprised at the good results, as I did not have much faith in medicine. After that I bought another box and took all of them, and they had such an effect on me that I feel like a new person. My bowels act regularly, and I can eat anything without belching. Before taking the Tablets the water would gather in my mouth and I would have to spit continually, but since taking the Tablets I am not troubled anymore. If I eat a hearty dinner I always take a Tablet and I experience no bad effects. Since my bowels act regularly and my food digests properly I rarely have a headache."

MAY KING, - - 2.20
SIRE OF BINGEN, 2:06 1/4, Champion Trotting Stallion of 1898 and 1899. Chestnut King, br. g. 2:12, Genevieve, 2:12 1/4, Pi Lijero, 2:12 1/2. Chestnut King, ch. g. 2:17 1/4, Allie King, 2:18 3/4, Nordhoff, 2:21 1/4, Barney King, 2:23 1/4, Lillian Wilson Matinee record 2:29 1/4, Nahesa, 1, 2:41 1/2, winner of Yearling Division Kentucky Futurity, 1895.
May King was foaled in 1886, is a dark rich bay with black points, no white; strong conformation; heavily muscled; perfectly sound.
SERVICE FEE, \$50.
LOOKAWAY, No. 12416, Record 2.22 1-2, Trial 2.12 1-2.
Sire of Winola, 2:00 1-4, Nowaday (3), 2:14 1-4, Blazeaway, 2:20 1-4, Gazeaway, 2:22 3-4 and LOOKAWAY, b. h. 16.2 1-2 hands, weighs 1275 pounds, by Look, sire of 13; dam, Rosalind by Harry Clay, 2:29; granddam, Rose Terry, by Hambletonian 10; great granddam by Vermont Black Hawk 5; Service Fee, \$50.
These stallions are at Lookout Stock Farm, South Natick, Mass., and their books are now open. For further information apply to
CHARLES WHITEMORE, 237 Albany Street, Boston.
YOUNG KING, No. 32604. Full Brother to BINGEN, 2.06 1/4.
B. h. foaled 1897; 16 hands, weighs 1135 pounds, by May King, 2:20; dam, Young Miss, by Young Jim. Will make full season. Service Fee, \$50.
COLNA DONNA 29171.
B. h. 15 3-4 hands, foaled 1897; sire, C. F. Clay, 2:18, sire of Connor, 2:03 1-4, Coleridge, 2:05 1-4, Choral, 2:06 1-2, and 50 others in the 2:30 list; dam, Griselda, 2:20 1-4, by Gambetta Wilkes, 2:19 1-4, sire of Guineette, 2:06, and 38 others in 2:30; second dam, Lady Veier (dam of Lottie Lorraine, 2:06 3-4, and 6 others in 2:30); by Garrard Chief. Service Fee, \$25.

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